

Phase (check one)	Type (check one)
<input checked="" type="checkbox"/> <b>Site Investigation</b>	<input type="checkbox"/> Work Scope
<input type="checkbox"/> Corrective Action Feasibility Investigation	<input checked="" type="checkbox"/> <b>Technical Report</b>
<input type="checkbox"/> Corrective Action Plan	<input type="checkbox"/> PCF Reimbursement Request
<input type="checkbox"/> Corrective Action Summary Report	<input type="checkbox"/> General Correspondence
<input type="checkbox"/> Operations & Monitoring Report	

**Phase I Site Assessment Update &  
Environmental Site Investigation Report**

**U.S. Tsubaki Facility  
222 Bowen Road  
Bennington, Vermont**

**VT SMS Site No. 2004-3196**

**Site Coordinates:**

**Latitude: 42° 53' 26.65"**

**Longitude: -73° 11' 19.73"**

*Prepared for:*

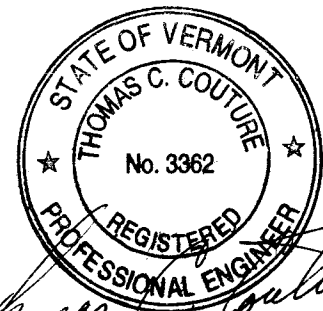
U.S. Tsubaki Corporation  
301 East Marquardt Drive  
Wheeling, Illinois 60090  
(847) 459-9500

*Site Contact:*

Mr. Eddie Teng  
U.S. Tsubaki Corporation  
301 East Marquardt Drive  
Wheeling, Illinois 60090  
(847) 459-9500 Ext. 1165

*Prepared by:*

Tighe & Bond, Inc.  
53 Southampton Road  
Westfield, Massachusetts 01085  
Contact: Paul G. Beaulieu, LSP  
(413) 572-3254



**March 2006**

## TABLE OF CONTENTS

### LETTER OF TRANSMITTAL

### SECTION 1 INTRODUCTION

1.1	Key Definitions and Acronyms.....	1-1
-----	-----------------------------------	-----

### SECTION 2 SITE DESCRIPTION AND SITE HISTORY

2.1	Existing Conditions .....	2-1
2.1.1	Property Description and Site Use.....	2-1
2.1.2	Surrounding Property Description.....	2-3
2.2	Area Mapping .....	2-3
2.2.1	Topography and Drainage .....	2-3
2.2.2	Site Hydrology .....	2-4
2.2.3	Surficial and Bedrock Geology .....	2-4
2.2.4	Surrounding Resource Areas .....	2-4
2.3	Site History .....	2-5
2.4	Site Reconnaissance.....	2-6
2.5	Hazardous Waste Generation .....	2-7
2.6	Areas and Contaminants of Concern .....	2-8

### SECTION 3 ENVIRONMENTAL REVIEW

3.1	Environmental Records Review .....	3-1
3.2	Database File Search .....	3-1
3.3	DEC File Review .....	3-3
3.4	Previous Environmental Investigations.....	3-5
3.5	Municipal File Review.....	3-9
3.6	Historical Records Review.....	3-9

### SECTION 4 PHASE I UPDATE CONCLUSIONS

4.1	Findings.....	4-1
4.2	Opinions .....	4-2

### SECTION 5 EP STATEMENT - PHASE I UPDATE

### SECTION 6 SUBSURFACE EXPLORATIONS AND ANALYSES

6.1	Drilling Program.....	6-1
6.1.1	Soil Boring Advancement .....	6-1
6.1.2	Monitoring Well Installation.....	6-1
6.2	Environmental Sampling Program.....	6-2
6.2.1	Soil (Surficial & Subsurface) Sampling & Analysis..	6-2
6.2.2	Groundwater Sampling & Analysis .....	6-3
6.2.3	Sediment Sampling & Analysis.....	6-4
6.2.4	Surface Water.....	6-4
6.3	Laboratory Analytical Results .....	6-4

6.3.1	Soil Laboratory Analytical Results .....	6-5
6.3.2	Groundwater Laboratory Analytical Results.....	6-6
6.3.3	Sediment Laboratory Analytical Results .....	6-7
6.3.4	Surface water Laboratory Analytical Results .....	6-7
6.4	Data Validation .....	6-8
6.4.1	Soil Laboratory Analytical Data.....	6-8
6.4.2	Groundwater Laboratory Analytical Data .....	6-9
6.4.3	Sediment Laboratory Analytical Data.....	6-9
6.4.4	Surface water Laboratory Analytical Data.....	6-10
 <b>SECTION 7 DEVIATIONS FROM WORK PLAN</b>		
7.1	Semi-VOC Analysis .....	7-1
 <b>SECTION 8 CONCLUSIONS - ENVIRONMENTAL SITE INVESTIGATION</b>		
8.1	Conclusions.....	8-1
8.2	Corrective Action Feasibility Investigation .....	8-3
 <b>SECTION 9 REFERENCES</b>		

**APPENDICES****APPENDIX A – FIGURES**

- Figure 1 – Site Locus
- Figure 2 – Base Plan/Vermont GIS Map
- Figure 3 – Orthophotograph
- Figure 4 – Site Plan
- Figure 5 – Historic Topographic Maps

**APPENDIX B – ASSESSOR’S INFORMATION****APPENDIX C – SITE PHOTOGRAPHS****APPENDIX D – DATAMAP FIRSTSEARCH REPORT****APPENDIX E – SOIL BORING LOGS****APPENDIX F – FIELD DATA SHEETS****APPENDIX G – ANALYTICAL RESULTS SUMMARY DATA TABLES**

- Table 1A – Soil Analytical Results – VOCs, Total Metals & PCBs
- Table 1B – Soil Analytical Results – Semi-VOCs & PAHs
- Table 2A – Groundwater Analytical Results – VOCs & Total Metals
- Table 2B – Groundwater Analytical Results – Semi-VOCs
- Table 3A – Surface water Analytical Results – VOCs & Total Metals
- Table 3B – Surface water Analytical Results – Semi-VOCs
- Table 4A – Sediment Analytical Results – VOCs & Total Metals
- Table 5 – Field Screening Results

**APPENDIX H – LABORATORY ANALYTICAL REPORTS****APPENDIX I – MATERIAL SAFETY DATA SHEETS (MSDS)****APPENDIX J – DEC FILE REVIEW INFORMATION****APPENDIX K – CORRESPONDENCE**

- DEC
- Town of Bennington

**APPENDIX L – LIMITATIONS**



Tighe & Bond has completed a *Phase I – Environmental Site Assessment Update* for the U.S. Tsubaki building, located at 222 Bowen Road, Town of Bennington, Bennington County, Vermont (the site). The assessment was performed as part of an environmental site investigation and was performed in general compliance with the American Society for Testing Materials (ASTM) Standard E1527-00 for Phase I Environmental Site Assessments.

One purpose of the assessment was to identify existing or potential recognized environmental conditions (RECs) associated with current or past activities at the site. For reference, a Site Locus Map, VT GIS map, and an aerial photograph, are included as Figures 1, 2, and 3, respectively, in Appendix A.

The tasks performed to evaluate the site are as follows:

- A reconnaissance inspection of the site
- An environmental database search, site history research and review of local, state and Federal records including Vermont Department of Environmental Conservation (DEC) records, pertaining to the use, storage and release of petroleum products and hazardous substances in the site vicinity
- A review of Bennington Assessor's, Collector's, and Town Clerk's office, Health Department, and Building Department files, and
- A review of geological publications and maps and Vermont Geographical Information System (GIS) data for the site area

## **1.1 KEY DEFINITIONS AND ACRONYMS**

This section summarizes some of the definitions and acronyms used throughout the report.

- Environmental Professional (EP) – A person meeting the education, training, and experience requirements as set forth in 40 CFR 312.10 (b).
- Environmental Site Assessment (ESA) – The process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to RECs.
- Historical RECs – an environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently.

- Reasonably Ascertainable - information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.
- Recognized Environmental Conditions (RECs) – The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

## **SECTION 2 SITE DESCRIPTION AND SITE HISTORY Tighe&Bond**

---

Existing conditions at the site and in the surrounding area were evaluated through a site reconnaissance visit and review of Town of Bennington and Department of Environmental Conservation (DEC) records. In addition, site conditions were evaluated through a review of other records and published mapping of the area surrounding the site. The observed conditions at the time of this investigation are described in the following sections.

The 5.38-acre site contains a former industrial manufacturing building, with numerous additions that occurred beginning in the late 1970s, and several parking areas along the west and south sides of the facility. An unnamed stream runs through the site on the north side of the facility. An area of undeveloped land is located on the north side of the property, along the length of the unnamed stream.

### **2.1 EXISTING CONDITIONS**

A description of the site and surrounding properties is presented in the following sections. Existing conditions were established through a site reconnaissance visit and review of Town and DEC records. Figures depicting the site and surrounding areas are included in Appendix A.

#### **2.1.1 Property Description and Site Use**

The U.S. Tsubaki site consists of one parcel of land located at 222 Bowen Road in the Town of Bennington, Bennington County, Vermont. The geographical location of the site is -73°11'20" west Longitude and 42°53'25" north Latitude. It should be noted that the property was formerly listed as 119 Bowen Road. According to the Assessors office, the renumbering occurred in 1999, as part of emergency response (911) preparations. The property has also been listed as 225 Bowen Road in U.S. EPA Locational Reference Tables (LRT) and in the Enforcement & Compliance History Online (ECHO) databases.

According to the deed records (Book 217, Page 127) on file in the Bennington Town Clerk's office, U.S. Tsubaki purchased the property from the Bennington County Industrial Corporation (BCIC) in 1977. Review of Bennington Assessor's Office information indicates the property is identified as Parcel Number 45-01-78-00. The property is currently for sale, and is currently enrolled in the DEC Redevelopment of Contaminated Properties Program (RCPP) program. A copy of the parcel map showing the U.S. Tsubaki property is located in Appendix B, and the parcel overlay is included on Figure 3 (Aerial Map) in Appendix A.

The U.S. Tsubaki company is a Japan-based manufacturer, with U.S. Tsubaki headquarters located in Wheeling, Illinois. The Bennington, Vermont facility was



considered a Small Quantity Generator (100-1,000 Kg/month of non-acute hazardous waste) (EPA ID VTD082275959, NAICS Code 33361, Engine, Turbine and Power Transmission Equipment), and manufactured sprockets for Tsubakimoto Chain Company during operation at this facility between April 1977 and September 2004. At one time, the facility employed a maximum of 165 people. In 2004, Tsubaki of Canada and U.S. Tsubaki, both subsidiaries of the Japan-based Tsubakimoto Chain Company, announced a plan to close the Bennington, Vermont facility in order to consolidate sprocket manufacturing with Tsubaki of Canada, Ltd. in Mississauga, Ontario, Canada.

One building is located on the property. The facility is currently unoccupied. The U.S. Tsubaki facility was originally built as a “spec” building by the Bennington County Industrial Corporation (BCIC), a non-profit economic development corporation. BCIC sold the property to U.S. Tsubaki in 1977. The first known industrial/commercial use of the property occurred after 1977. The building was constructed with a concrete foundation and steel frame. The building is an industrial, metal building, with a 12-inch thick concrete foundation, metal exterior walls, metal gable and roof. The property is connected to the municipal water and sewer system. An electric off peak heated floor initially installed in the building proved inadequate, requiring the later installation of a suspended propane gas fired hot air system. The facility was most recently heated with forced air. The manufacturing portion of the building is one story, with 73,840 square feet of floor area. A two-story 900 square foot office area was constructed on the west side of the facility in late 1990. The office contains hardcover flooring, press board and panel walls, and dropped suspended acoustic ceilings. The building currently has 4,500 square feet of office space and 68,096 square feet of warehouse space.

It appears that many additions, alterations and renovations to the interior of the space have occurred, including renovations and additions in 1977, 1980, 1981, 1984, 1985 and 1990. Minor interior renovation and upgrades completed in April 1998 included two exterior entrance doors, loading dock exit door stairway, rear manufacturing door replacement, construction of a small observation deck and installation of concrete steps (completed in April 1998). In late 1990, a 2-story 900 square foot office area was permitted. In 2001, a new fire alarm system was installed.

A diagram indicating the floor plan of the former production facility is included in Appendix B. A driveway connects Bowen Road to a loading dock, located at the northwest corner of the building. The northwest corner of the facility interior was previously used for packing, shipping and receiving of supplies, and for storage of both chains and sprockets. The east wall of the facility housed the former alteration department, hand labor department, welding and heat treatment and an office. The former screw machine department was located in the southeast corner of the building, near the ground-level overhead doors. The southern end of the facility housed the

former plate storage, raw material cutting (flame cut) area, electrical room and saws. Two loading docks are also located on the southwest corner of the facility. The southwest corner of the facility interior was previously used for hazardous waste storage and machine maintenance. A lathe department was housed adjacent to the offices and locker rooms, located along the west side of the building. The center of the facility floor housed the following departments: hobbing machine department, plate bore work cell, welding and heat treatment, drill and tap department, keyway broach department, finishing department (including the paint booth and black oxide storage), and quality assurance department. This central area also housed the tool room and tool crib, and an old compressor room. A furnace was located in the northeast portion of the facility, near the former heat treatment department. Columns are located throughout the facility. Sylvania energy efficient lighting is used throughout the warehouse.

### **2.1.2 Surrounding Property Description**

The site is located to the north of VT Route 9 and to the east of Vermont Route 7 in Bennington, Vermont. An unnamed stream runs along the north side of the property. Bowen Road abuts the property to the west and south (see Figure 3 in Appendix A). The adjacent property to the south is occupied by Jard, a now defunct manufacturing building. Four residential properties abut the property to the east. Baseball fields abut the property to the west. The 8.91-acre property to the north of the U.S. Tsubaki property is primarily wooded (Appendix A; Figure 3). Vermont State Highway and Vermont Container Corporation are located across Bowen Road to the east.

## **2.2 AREA MAPPING**

Mapping reviewed as part of this investigation included topographic maps prepared by the United States Geological Survey (USGS), Federal Emergency Management Administration (FEMA), VT GIS, and Vermont Department of Water Resources mapping. Vermont Geological Survey surficial and bedrock geology maps and Town of Bennington maps were reviewed as well.

### **2.2.1 Topography and Drainage**

The site location is illustrated on the USGS Topographic Map of the Bennington, Vermont Quadrangle (Figure 1, Appendix A). As Figure 1 indicates, the facility is situated approximately 600 feet above mean sea level and is relatively flat in the developed area. Topography in this area is shown to be sloping generally to the south, towards the unnamed stream located north of the subject site. Topography in the site area slopes gradually to the south-southwest toward the Roaring Branch River, which is located approximately 1,000 feet south of the site.



According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community-Panel Number 500013 0005 C, effective June 17, 1986, the site is located in a Zone C area. Zone C is identified by FEMA as being “Areas of minimal flooding”. See Appendix B for a copy of this map.

### **2.2.2 Site Hydrology**

According to the Town of Bennington parcel plan and a VT GIS map prepared for this assessment, no wetlands exist on the property. Based on area topography, the location of the unnamed stream, the Walloomsac River, Tighe & Bond’s review of documents for this site, and Tighe & Bond’s 2006 site investigation activities, groundwater flow at the site is generally to the northwest, toward Furnace Brook. The water table is found at depths of 3 to 8 feet below ground surface (bgs). Stormwater on portions of the site is managed by catch basins and culverts as well as by a swale along the eastern edge of the property.

The site is served by the Bennington Municipal water system. However, according to the VT GIS Base Map (Figure 2 in Appendix A), four private wells are located within 0.5 miles of the site.

### **2.2.3 Surficial and Bedrock Geology**

According to the *Surficial Geologic Map of Vermont*, dated 1970 and published by the Vermont Geological Survey, surficial geology at the site consists of frontal moraine deposits and till, consisting of a mixture of clay, silt, sand, gravel, and boulders ranging widely in size and shape. Cobbles and boulders present at the subject site have posed a challenge to previous subsurface investigations conducted at this site and at the adjacent Jard Company site.

The bedrock at the site is the Dunham Dolomite which is characterized by a very low primary porosity. Based upon depth to bedrock encountered at the adjacent Jard Company site, depth to bedrock at the U.S. Tsubaki property is believed to be approximately 50 feet.

### **2.2.4 Surrounding Resource Areas**

According to the VT GIS map (Appendix A; Figure 2), there are two hazardous waste generators within a 0.5-mile radius of the site, to the northwest. The map also indicates there are two hazardous waste sites along Bowen Road, one of which is U.S. Tsubaki and the other is the VAOT Bennington Garage, located at 359 Bowen Road. A third hazardous waste site, located to the south of Bowen Road and north of the Roaring Branch River, is presumably the Jard facility. There are three U.S. EPA regulated facilities within a 0.5-mile radius of the subject site. An Environmental

FirstSearch database report prepared for this assessment and discussed in more detail in Section 3 Environmental Review, indicates that one RCRA generator (VT AOT Garage) is located within a 0.5-mile radius of the subject site, to the southeast of the property, in Bennington, Vermont.

The FirstSearch report indicates that one of the two identified hazardous waste sites is the subject site. Although the subject site is connected to the municipal water and sewer systems, the VT GIS map indicates that two private wells located to the northeast of the subject site are greater than 500 feet away.

## **2.3 SITE HISTORY**

Site history was obtained through research at the Town Clerk's office, in an interview with personnel from the Bennington County Industrial Corporation (BCIC), and through a review of Sanborn Fire Insurance maps and DEC files.

The U.S. Tsubaki facility was originally constructed by the Bennington County Industrial Corporation (BCIC) as a "spec" industrial shell building in the late 1970s. In 1977, BCIC obtained a land use permit for site and construction improvements to the facility, including landscaping and parking. The Town of Bennington authorized connection of the site building to municipal water and sewer, and also approved installation of a sprinkler system. In May, 1977, District Commission #8 granted a request to transfer the land use permit (8B0088) from BCIC to U.S. Tsubaki, Inc. On April 8, 1977, the District Environmental Commission received an application from U.S. Tsubaki, Inc. to transfer the permit to U.S. Tsubaki in accordance with Title 10 USA, Chapter 151 (Act 250). The U.S. Tsubaki Corporation was formed in February 1971 in Illinois, but registered in Vermont on February 7, 1977.

Bennington County Industrial Corporation (BCIC) purchased the parcel of land to comprise the property on which the BCIC spec building was ultimately built. Based upon conversations with BCIC personnel and research in the Town Clerk's office, use of the property prior to being developed by BCIC was most likely agricultural. Historical topographic maps dated 1898 and 1954 (Figure 5 in Appendix A) do not indicate the current building associated with the U.S. Tsubaki facility manufacturing operations. During a review of deeds in the Town Clerk's office on November 14, 2005, an attempt was made to determine the grantor(s) who sold the property to BCIC. Based on initial review and conversations with Town Clerk's office personnel, it is possible that the 222 Bowen Road property was purchased from Mr. Lafayette Lyons, or from the Mill Supply Company. According to Building Department records, at the time that BCIC sold the property to U.S. Tsubaki in 1977, adjoining land owners included property owned by BCIC (115 Elm Street), Jard Company (Bowen Road) and three other properties on Bowen Road.



## **2.4 SITE RECONNAISSANCE**

Tighe & Bond personnel conducted a site reconnaissance inspection at the property on November 16, 2005, with James Secor of MacDonald-Secor Associates, George LeBlanc from the Town of Bennington, and Patricia Coppolino of the Vermont DEC. Additional site visits were conducted on November 14, 2005, February 3, 2006 and February 9, 2006 during site investigation activities described in Section 6 of this report. Observations made during these four site visits are described below. Photographs taken during the November 14, 2005 site visit and during subsequent site investigations are presented in Appendix C of this report.

The entire facility is approximately 73,840 square feet in size. The original facility was completed as a “spec” industrial shell building in 1977, and has been added to and modified numerous times since the original construction. The facility on the property is currently vacant. The office addition on the west side of the facility is a maze of rooms currently empty. Materials observed in the office area include furniture and general office storage. The majority of the facility is comprised of the former production facility. The former production and manufacturing area was vacant at the time of the site visit, with the exception of remaining equipment lining the east wall, as well as sinks located in the center of the building.

At the time of the November 16, 2005 site visit, areas of staining and cracks were observed on the concrete floor. Additionally, three open floor drains were observed in the facility – one floor drain was located near the former eyewash station, and two were located in the central and south central area of the facility. A sump pump is located on the east-central portion of the facility.

Additionally, two roll off waste disposal containers were observed on the property on November 16, 2005. One roll off (approximately 10-15 yards), contained metal shavings and was leaking white liquid from the roll off. According to a truck driver on site at the time of the site visit, the roll offs contain material generated from the NSK facility in Bennington, and that the roll offs have been parked temporarily on the U.S. Tsubaki property. According to the truck driver, the white liquid observed leaking from the roll off was a non-hazardous coolant. George Akin & Sons, a scrap metal company, have been storing roll-offs containing metal cuttings at the property and have subsequently been told by U.S. Tsubaki to cease and desist from this practice.

A catch basin and culvert are located on the east side of the facility, between the building and the property line. The culvert outfall is located near the northeast corner of the building, and north of Transformer T-1. The outfall discharges to the unnamed stream, which flows west toward Bowen Road. A trench drain/ stormwater drain was observed on the exterior of the facility, located outside the loading dock area on the southwest side of the building. Based on dye testing conducted at the property on

February 3, 2006 (and further described in Section 6), this trench drain appears to collect stormwater drainage from the parking area, and discharges the stormwater into the unnamed stream via a black poly culvert. No stormwater permits exist for this property. Groundwater also appears to discharge to the unnamed stream through this black poly culvert.

The footprint of the U.S. Tsubaki facility comprises the majority of the subject site. Two parking areas are located on the south and west sides of the facility. The remainder of the site consists of a landscaped lawn area located along Bowen Road on the west side of the facility, as well as the wooded area that surrounds the unnamed stream that runs along the northern edge of the property.

Two pad-mount transformers are located on the property. One transformer (T-1) is located on the northeast side of the property, and is situated on a concrete pad, in a grassy area between the building and the unnamed stream. A second transformer (T-2) is located on the south east side of the property, and is situated on a paved surface. On February 16, 2006, Jim Secor of MacDonald-Secor Associates, Inc. and an electrician assisted Tighe & Bond personnel to assess whether the transformers contain polychlorinated biphenyls (PCBs). According to the manufacturer's badges located on the inside doors of the transformers, transformer T-1 contains less than 1 part per million (ppm) PCBs, and transformer T-2 contains non-PCB oil. Photographs of these transformer badges are included in Appendix C.

As part of the site visit, Tighe & Bond walked the perimeter of the property boundaries. No evidence of dumping, staining or stressed vegetation was observed during the perimeter walk. Visual inspection of adjacent properties from the subject property, Bowen Road, and an aerial photo review did not reveal any evidence of hazardous substances being stored, handled, treated or disposed on these properties.

## **2.5 HAZARDOUS WASTE GENERATION**

Sprocket manufacturing processes at the 222 Bowen Road facility are illustrated in the process diagrams and floor plan included in Appendix B. The processes began with the cutting of sheet and bar stock with lathes or screw machines. After materials are cut to size, holes were cut in the blanks before milling (hobbing). The blanks were then used to create sprockets, which were often subsequently welded or drilled to meet customer specification. The sprockets were then finished, to prevent oxidation of the parts during storage. Finishing was applied as a spray or using a black oxide dipping process.

A variety of waste streams were generated as part of this process, including waste oil (ID # VT02) (hydraulic oils from equipment maintenance), skimmings from the cutting machine water soluble coolant, and from centrifuging metal scraps which were



produced by the milling process. Additionally, filter media used to remove particulates from the grinding machines (ID # VT 02), coolant fluid, corrosive wastes (from parts cleaning and black oxide coating processes), and paint sludge (ID # F001 and F005) were also generated. According to a VT Hazardous Waste Handler Site ID form for the facility, estimated monthly quantities of wastes generated included 110 gallons of waste corrosive liquid (basic, EPA/State waste code D002), 10 pounds of waste flammable liquid (D001) and 10 pounds of waste corrosive liquid (acidic) (D002). Hazardous materials used included propylene/propane and raw steel. The last hazardous waste shipment reportedly occurred on July 8, 2004 (Manifest No. VT0133038 0625905). Hazardous waste transporters included Jones Environmental Services and Clean Harbors. The Hazardous Waste Storage Area located in the south loading dock area reportedly was the only collection point for any of these hazardous wastes

During a routine RCRA compliance evaluation inspection in June 2002, it was noted by the inspector that U.S. Tsubaki had changed its manufacturing operations since the previous inspection (August 1994) to a “cell structure”, in which each cell is responsible for all the steps in the manufacturing product for a specific order, with the exception of the black oxide and power coating processes. This cell structure is illustrated in a diagram in Appendix B.

## **2.6 AREAS AND CONTAMINANTS OF CONCERN**

For analytical purposes, chemicals of concern at this site include Priority Pollutant Metals (PP13) (paints, dyes, metal, lathing), Volatile Organic Compounds (VOCs) (EPH Method 8260), and semi Volatile Organic Compounds (sVOCs) (EPA Method 8270).

Based on a site visit conducted by Tighe & Bond personnel on November 16, 2005 with DEC, the following were identified as potential contaminant sources for which DEC required additional environmental assessment:

- A former floor drain outlet pipe is located approximately 60 feet from the northwest corner of the building;
- Oil-like staining was observed on the facility floor at various areas throughout the building, coupled with observed cracks in the concrete slab;
- A trench drain is located near the truck loading dock at the southeast corner of the facility;
- Active floor drains were observed on the east side of the facility floor.

Based on these observations, knowledge of former manufacturing processes inside the building and cracks observed in the concrete slab, Tighe & Bond proposed the site investigation activities described in Section 6 of this report.

**3.1 ENVIRONMENTAL RECORDS REVIEW**

As part of this site investigation, Tighe & Bond commissioned a database search of Federal and state records that would indicate the potential presence of environmental hazards at, or in close proximity to, the subject site. The database search was supplemented by a file review conducted in person on January 14, 2006 at the VT DEC offices located in Waterbury, Vermont to confirm database information and to review file data not otherwise available in the database search.

**3.2 DATABASE FILE SEARCH**

A Federal and state database search for the site and surrounding area was conducted using FirstSearch Technology Corporation and is included in their Environmental FirstSearch Report included in Appendix D. The date of the most recent update by the regulatory agency maintaining each database is listed at the beginning of the FirstSearch report. Those sites with adequate address information (geocoded) are plotted on maps provided within the FirstSearch report. Sites with minimal address information (non-geocoded) are listed separately in the FirstSearch report.

<b>Table 3-1 Database File Search Summary 222 Bowen Road, Bennington, Vermont</b>		
<b>Database Searched</b>	<b>Search Radius (mile)</b>	<b>Sites Listed</b>
National Priority List	1.0	0
RCRA COR Facilities	1.0	0
State Identified Hazardous Waste Sites	1.0	19
Federal CERCLIS List	0.5	1
State Listed Landfills and Solid Waste Facilities	0.5	0
State Listed Spills – 1990 to Present	0.5	6
RCRA TSD Facilities	0.5	0
RCRA Generators – Large and Small Quantity	0.25	2
Emergency Response Notification System	0.25	2
State Registered UST/AST	0.25	1

A summary of the Federal and state listings retrieved by the database search is provided at the beginning of the FirstSearch report and in Table 3-1 above.



One state registered UST location was identified through the database search. The listed site is the VT Agency of Transportation (AOT) Garage located at 359 Bowen Road in Bennington, approximately 0.17 miles southeast of the subject site. The UST is registered as a 10,000-gallon diesel fuel UST installed in 1991. Five former registered USTs located at the VT AOT property were removed in 1988 and 1991. Two 2,000-gallon USTs containing gasoline and diesel were removed in 1988. One 275-gallon UST containing used oil was removed in 1988. A 3,000-gallon fuel oil UST was also removed in 1991. Finally, an 8,000-gallon diesel fuel UST was removed in 1991. The location of the registered UST is cross-gradient from the subject site and potential contamination from this site would not be expected to have a negative impact on the subject site. Additionally, during file review conducted at DEC, it was noted that a Sites Management Activity Completed (SMAC) designation was to have been issued in July, 2005.

One leaking UST (LUST) location is located within .25 miles northeast of the subject property, at Vermont Container Corporation. However, according to the FirstSearch report, two USTs containing diesel and fuel oil at this location were removed in 1993, and contamination found was below the applicable PRG (<10 ppm diesel/heating oil #2). Three additional LUSTs are located .37 and .38 miles northwest of the subject property. According to the FirstSearch report, a waste oil release was discovered in 1995 at Morrison Sales and Service on Kocher Drive in Bennington. A product recovery well was installed, with ongoing passive recovery and free product removal efforts. A soil pile was treated and thin-spread onsite. A 1989 used oil 1,000-gallon UST release occurred at K-Mart, 19 Kocher Drive, and contamination was subsequently determined to be below the state standard. A 1994 gasoline release from a service station at the Bennington Square Mall on Kocher Drive was later closed in 1996 after completion of site management activities.

There are nineteen active geocoded state-listed sites located within a 1-mile radius of the subject site. Five of these state sites are listed within a 0.5-mile radius of the subject site. Available information for these sites was reviewed at the DEC and is summarized below in Section 3.3 DEC File Review. One of the identified closed state sites is the subject site. Information regarding the subject site is summarized below in Section 3.3 DEC File Review, and in Section 2 of this report, General Site Description.

Two spills occurred on the U.S. Tsubaki property. Details of these spill incidents are discussed below in Section 3.3 DEC File Review.

Two geocoded RCRA Generators, in addition to the subject site, are listed in the database report. One non-geocoded RCRA Generator is listed. Review of available information about this site indicates that it is located within a 0.25-mile radius of the subject site. No geocoded or non-geocoded State Listed Landfills or Solid Waste Facilities are listed in the database report.

### 3.3 DEC FILE REVIEW

On February 14, 2006, Tighe & Bond personnel performed a review of DEC files to identify additional pertinent information for the site, verify the relative locations of sites listed in the FirstSearch report, and to assess the potential impact to the site from documented releases on surrounding properties. No additional sites that could potentially have an environmental impact on the subject property were found in these databases other than those listed in the FirstSearch report. A review of files for the subject site and listed sites in close proximity to the site indicated the following:

- U.S. Tsubaki (subject site): The U.S. Tsubaki site is listed on the State (State ID 20043196/Closed), Spills (1991 and 1998) and RCRA list.

On August 9, 1991, an employee of U.S. Tsubaki reported to the Vermont Agency of Natural Resources Emergency Management that 200 gallons of an unknown chemical had been dumped into a storm sewer on the property. The caller, who wished to remain anonymous, indicated that dumping into the storm sewer was an ongoing practice at the facility. According to the spill report, the complaint was referred to the Agency of Natural Resources RCRA division. On October 23, 1991, VT ANR conducted a RCRA compliance inspection regarding this spill report. The inspector was unable to find any indication of improper disposal of hazardous waste after walking the grounds and inspecting the two storm drains located at the south end of the facility.

On August 20, 1998, foam was observed in Furnace Brook, which is a tributary of the Walloomsac River. A dye test was conducted at the U.S. Tsubaki facility by the Bennington Fire Department and Terry Aiken of the Hazardous Materials Team. This dye test indicated that a floor drain located in the U.S. Tsubaki facility interior discharged directly to the brook. U.S. Tsubaki shut down the machinery believed to have been the source of the release. The foam was determined to be detergent. The spill complaint was referred to the Enforcement division.

In August 1998, inspection violations were noted at the property. U.S. Tsubaki was given one month to discontinue the use of floor drains along the east wall of the facility, seal off manholes as needed to prevent leakage of hazardous materials in groundwater piping, determine if any other floor drains were connected to the culvert located on the east side of the facility, and to have the sprinkler and fire alarm system inspected.

Jard Corporation (directly adjacent to and south of the subject site): The former Jard Company property is located on Bowen Road in Bennington, Vermont. The 14-acre property was formerly occupied by a manufacturing facility and is currently abandoned. Prior to 1969, the property was undeveloped woodland. From 1969 to



1989, Jard Company manufactured capacitors, non-fluid transformers, and motors used in household appliances on the property. Hazardous waste generated during manufacturing processes included polychlorinated biphenyl (PCBs) contaminated oils, including Aroclor 1242 from 1969 to 1971 and Aroclor 1016 from 1971 to 1978); SVOCs, including bis-2-(ethylhexyl)phthalate (DEHP); waste paints and paint solvents; waste zinc oxide, methylene chloride; trichloroethylene (TCE); 1,1,1-trichloroethane (1,1,1-TCA); waste varnish and varnish solids and rejected capacitors. Two (2) dry wells located on the property potentially received PCB- and phthalate-contaminated wastewater.

Jard, Inc. declared bankruptcy in 1989. At that time, VT ANR conducted a RCRA site inspection in which hazardous waste concerns were identified. These concerns were in addition to previous site assessments conducted in 1979 and 1987 regarding PCBs and zinc oxide, respectively.

The following investigations and removal actions have been conducted at the site:

- 1989: Environmental Site Assessment, Wehran EnviroTech
- 1991: Phase II Environmental Assessment, Wehran EnviroTech
- 1991: Potential Hazardous Waste Site Assessment, VT ANR
- 1993: Site Inspection, Final Report, US EPA Region 1
- 1995: Sediment Results, VT ANR Sites Management Section
- 1998: Post Excavation Sampling – US EPA Region 1
- 1998: Removal Program Preliminary Assessment/Site Inspection Report, US EPA Region 1
- 2000: Technical Memorandum, Groundwater Investigation, Lockheed Martin

US Environmental Protection Agency (EPA) removal actions have occurred at the site, including removal of waste capacitors, PCB-contaminated soils, and drums containing PCB transformer oils. The Town of Bennington was awarded US EPA funding in February 2005 to conduct a Targeted Brownfield Assessment (TBA) at the Jard site, which is administered by VT DEC, Brownfield program.

August 2005 TBA activities conducted by Stone Environmental, Inc. revealed the following: PCB contamination in shallow overburden groundwater and a migration of a co-mingled contaminants groundwater plume (observed in previous investigations), a soil gas plume beneath the concrete slab, PCB contamination of interior building materials and in exterior surface and deep soils, and VOC, SVOC

and PCB contamination in sub-slab soils. Additionally, the investigation indicated that the Town of Bennington municipal sanitary sewer system had been impacted by PCBs from the Jard site.

In December 2005, a Corrective Action Feasibility Investigation (CAFI) Report was submitted to VT DEC by Stone Environmental. The CAFI presented two remedial alternatives for the site, including a Brownfield Re-Use Scenario, and an interim remedial measure (IRM). The IRM proposes two alternatives, including removing the existing building, capping slab and exterior surface soils and restricting access to the site, or demolishing the building.

Based on the groundwater flow direction (to the northwest) calculated for the Jard site, as indicated on the site plans for the Targeted Brownfields Assessment, Former JARD Company site (Appendix J), the documented releases at the Jard Company facility are not considered to have ongoing impact to the subject site.

No other sites listed in the FirstSearch database report are likely to pose a threat to the environmental quality of the subject site, based on previously calculated direction of groundwater flow, distance from the subject site, extent of remediation that occurred, or closed status of the release.

### **3.4 PREVIOUS ENVIRONMENTAL INVESTIGATIONS**

In December 2003, Tighe & Bond completed a Phase I Environmental Site Assessment (ESA) and Environmental Compliance Audit of the U.S. Tsubaki facility located at 222 Bowen Road. The investigation was conducted for Mr. Tom Barton of U.S. Tsubaki's corporate office during November 2003. Tighe & Bond also performed an Environmental Compliance Audit (ECA) of the Bennington, Vermont facility. The objective of the ECA was to audit the facility, identify substances of regulatory non-compliance (findings) and to document these findings. Recognized environmental conditions (RECs) noted in this report included the proximity of the subject site to the Jard Company property, located to the south of U.S. Tsubaki and across Bowen Road. Additional information regarding the Jard Company is included in this section.

Given the presumed groundwater flow direction at the U.S. Tsubaki site at that time, it was concluded that documented releases to soil and groundwater at the Jard property were likely to have impacted soil and groundwater quality at the U.S. Tsubaki facility. Additionally, the report noted that a potential existed for a release to have occurred at the U.S. Tsubaki facility, based upon the volume of oil and hazardous materials used in the previous 25 years, and the presence of catch basins and floor drains. The report recommended that a series of soil borings be advanced and groundwater monitoring wells be installed as part of Phase II site investigation activities. Fourteen (14) minor deficiencies were identified during the 2003 audit inspection at the subject site. It was recommended that U.S. Tsubaki correct the minor deficiencies as soon as practicable



and to implement systems to prevent the reoccurrence of these deficiencies in the future.

In February 2004, Tighe & Bond conducted a limited subsurface investigation to evaluate subsurface conditions at the site. A February 2004 Site Investigation Report prepared for U.S. Tsubaki summarized the results of this initial Phase II site investigation conducted at 22 Bowen Road in Bennington, Vermont. The investigation included the advancement of 13 soil borings (January 2004), the installation of two groundwater monitoring wells (January 2004), and the subsequent collection of soil samples, groundwater and sediment samples. The February 2004 report was generated in general accordance with the Work Plan prepared by Tighe & Bond (December 17, 2004) for U.S. Tsubaki.

Based on the results of that investigation, Tighe and Bond concluded the following:

- Petroleum constituents were detected in the site soils at U.S. Tsubaki. Laboratory reports confirmed the presence of TPH and VOCs. However, the reported concentrations of TPH in all four soil samples submitted for analysis were well below the DEC informal industrial standard of 1,000 mg/kg. Two VOCs were detected in soil sample MW-2 (5-7') and were reported at concentrations significantly below the NHDES Method 1, S-1 Soil Standards. Based on the reported concentrations of petroleum constituents in the laboratory reports and the field screening results, site soils did not appear to pose a risk to site groundwater.
- TPH was detected in sediments collected from the unnamed stream located adjacent to the property. The maximum TPH concentration was detected in SED-2, collected downstream from the site, which was 127 mg/kg.
- Based on the presence of TPH collected from a sample downstream of the site facility, the report indicated that a potential risk to the surface water may exist.
- The risk posed to drinking water, indoor air and subsurface utilities from the petroleum constituents detected in the site soils and groundwater was determined to be negligible.

Based on the above conclusions and the fact that U.S. Tsubaki had indicated that they would be closing the Bowen Road facility, Tighe & Bond recommended that the U.S. Tsubaki facility be closed in accordance with Section 7-309(c) of the Vermont Hazardous Waste Management Regulations. On November 1, 2004, the Vermont Agency of Natural Resources, Waste Management Division (WMD) confirmed facility closure based upon certification materials submitted by U.S. Tsubaki in August, 2004.

On August 30, 2005, DEC issued an Alleged Notice of Violation letter to U.S. Tsubaki, Inc. regarding the closure certification of the 222 Bowen Road facility. According to the letter, a representative of BCIC informed the Vermont Agency of Natural Resources, Waste Management Division (WMD) that the building had “industrial residue” on the interior surfaces of the structure. The letter requested that a work plan be submitted to VT DEC regarding complete closure of the facility. Additionally, the letter also requested that additional Phase II activities be conducted at the site. A copy of this correspondence is included in Appendix K.

On October 4, 2005, U.S. Tsubaki proposed a method of decontamination of the facility interior in order to fulfill part of the site closure activities. Tighe & Bond personnel performed wipe sampling of the interior walls of the facility building on November 14, 2005. U.S. Tsubaki wished to sample the building interior walls prior to cleaning the walls to determine whether or not the materials and the waste water generated during the cleaning of the walls needed to be handled as a hazardous waste.

Due to the nature of the materials (stained insulation and wall surfaces) and lack of standard sampling protocols for collecting such samples, Tighe & Bond collected wipe samples from the wall surfaces by adapting a sampling method typically used in the electric utility industry to collect wipe samples from stained concrete surfaces for PCB analysis. Analytical parameters (Chromium, volatile organic compounds and semi-volatile organic compounds) were selected based on DEC correspondence from Peter Marshall, Chief, Hazardous Waste Regulation Section, to U.S. Tsubaki. This DEC correspondence included one metal (Chromium) in a list of hazardous materials and hazardous waste constituents used on site. Other hazardous waste materials and hazardous waste constituents used on site included tetrachloroethylene, benzene, naphtha and mineral spirits parts washing fluids, water soluble coolants, various petroleum distillates and used oil, xylene, toluene and other waste pain related materials (solvents with a waste code of F005), and corrosive and ignitable hazardous wastes. Therefore, each sample was analyzed for chromium by a modified US EPA method 6010, for VOCs by a modified method 8260 and for semi-VOCs by a modified method 8270.

Specifically, to accomplish the sampling for the U.S. Tsubaki project, Tighe & Bond used sterile gauze pads moistened with deionized water for wipe sampling for chromium analysis. Sterile gauze pads moistened with methanol were used for the volatile organic compounds (VOCs) and semi volatile organic compounds (semi-VOCs) analyses. A 10 cm x 10 cm (100 cm<sup>2</sup> sample area) disposable template was used to define each sample area. Two wipe samples were collected from each of the four interior building walls and two samples were collected from areas of observed staining on the building floor, for a total of ten samples. A Site Plan indicating these sampling locations is included in Appendix A.



Samples were transferred to appropriate glass containers and were transported under proper chain of custody procedures to Alpha Analytical laboratory in Westborough, Massachusetts. Analytical results, included in Appendix B, are reported in micrograms. [Please note that these results should be considered as micrograms per 100 centimeters square ( $\mu\text{g}/100\text{ cm}^2$ )].

The following results were noted:

- Total Chromium was detected in all samples except S-1 (West Wall-south), S-4 (North Wall-East) and S-8 (South Wall-West). Analytical results for Chromium ranged between  $0.70\text{ }\mu\text{g}/100\text{ cm}^2$  in S-6 (East Wall-South) to  $90.0\text{ }\mu\text{g}/100\text{ cm}^2$  in S-7 (South Wall).
- A variety of phthalates were detected in samples S-1, S-2, S-5, S-7, S-9 and S-10. Bis (2-ethylhexyl) phthalate was detected in samples S-1, S-2, S-5, S-9 and S-10. Di-n-butylphthalate was detected in sample S-2 and S-7. Di-n-octylphthalate was detected in samples S-1 and S-2. No other volatile organic compounds (VOCs) were detected in any of the wipe samples. Phthalates are industrial compounds that have been widely used, including uses as plastic softeners, lubricants and wood finishers. The compounds can also be found in vinyl flooring and emulsion paint.
- Tighe & Bond attempted to collect one sample for ignitability and corrosivity analyses, as requested by DEC. However, due to the thin coating of this material on the building walls and the insufficient volume of material collected, these analyses were not possible.

Because no analytical standards have been devised for this particular sampling methodology, it was recommended that these analytical results be shared with the local sewer authority in order to ensure that wastewater generated during the cleaning of the interior facility walls was properly disposed.

A letter report summarizing the wipe sampling analytical results was sent to the Town of Bennington Water Resources Superintendent, Terrance Morse, and to Randy Bean, Environmental Analyst IV at VT DEC. Based on a review of the analytical data and the small volume of wash water discharge (approximately 65,000 gallons), it was determined that discharge resulting from the facility interior washing could be discharged to the Bennington municipal sanitary sewer system, via a manhole located on the west side of the facility, adjacent to Bowen Road. The contractor, Americlean, commenced the interior facility cleaning on February 20, 2006. Correspondence from DEC and the Town of Bennington documenting approval for wash water discharge is included in Appendix K. Descriptions of additional site investigation activities, including February 2006 dye testing results, are included in Section 6.

### **3.5 MUNICIPAL FILE REVIEW**

As part of Tighe & Bond's file review, Tighe & Bond personnel visited the following Town of Bennington municipal offices on November 14, 2005: Assessor's, Town Clerk, Collectors, and the Health and Building Departments. The Bennington Fire Department was contacted by phone in February 2006. Information from research conducted in these municipal offices has been incorporated throughout this report.

### **3.6 HISTORICAL RECORDS REVIEW**

Tighe & Bond reviewed available historic topographic maps for the subject site for the years 1898 and 1954 (Figure 5 in Appendix A). The building currently located at 222 Bowen Road is not present on either the 1898 or 1954 historic topographic maps of the Bennington, Vermont quad (USGS 15 minute series).

## **4.1 FINDINGS**

The U.S. Tsubaki site consists of one parcel of land located at 222 Bowen Road in the Town of Bennington, Bennington County, Vermont. According to the Bennington Town Clerk's office, U.S. Tsubaki currently owns the property. Review of Bennington Assessor's Office information indicates the property is identified with Property ID 45-01-78-00. The site is currently zoned for industrial use. The site was sold to U.S. Tsubaki in 1977, and was used for sprocket manufacturing between 1977 and 2003.

One purpose of the assessment was to identify existing or potential recognized environmental conditions (RECs) associated with current or past activities at the site. Additional environmental site investigation activities, including soil (surficial and subsurface), groundwater, surface water and sediment sampling were also conducted at the site. Conclusions regarding the additional site investigation activities are addressed in Section 9 of this report. No existing RECs were identified through this assessment. However, potential RECs are listed below:

### Potential Recognized Environmental Conditions

- Three active floor drains were observed in the facility (Figure 4 Site Plan in Appendix A). These floor drains are presumed to discharge to the municipal sanitary sewer, based on dye testing conducted as part of this site investigation. However, the fate of these floor drains could not be positively confirmed at the time of this investigation, due to the fact that the volume of water poured into the floor drains and the volume discharged into the manhole located on the south side of the property could not be confirmed to be the same. Televising these three open floor drains was considered, in order to adequately assess the discharge locations. However, 500 feet of line would have been required to televise the drains. Additionally, no soil was present in these three floor drains, and, therefore, soil sample collection from these three floor drains was not possible.

Depending upon the future use of the building on the 222 Bowen Road property, it is recommended that the potential purchaser consider closing these three open floor drains in accordance with Vermont DEC's Underground Injection Control Program requirements.

- A trench drain was observed near the loading dock area on the southwest side of the building. This trench drain receives stormwater runoff during rain events. Surface water was observed to have collected near the trench drain after a rain event, due to the slope of the pavement in this area. During dye testing of this trench drain, it was confirmed that the trench drain discharges into the unnamed stream on the north side of the facility. Depending upon the future use of the



building on the 222 Bowen Road property, it is recommended that the potential purchaser amend this current stormwater conveyance system.

## **4.2 OPINIONS**

The Phase I Environmental Site Assessment Update conducted for the U.S. Tsubaki site identified no conditions indicative of threatened releases of petroleum and petroleum products at the subject property. However, due to the presence of three open floor drains observed in the facility interior, previous site investigation activities conducted at the site, and on the subject site's proximity to an EPA-regulated site (Jard Company), a "Phase II" subsurface investigation was conducted to include evaluation of the soil, groundwater, surface water and sediment for potential releases that could have impacted the site. The details of the Phase II investigation are included in Sections 6 to 8 of this document.

## **SECTION 5 EP STATEMENT - PHASE I UPDATE**

**Tighe&Bond**

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental professional, as provided in 40 CFR 312.10.

I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Paul G. Beaulieu, PWS, LSP  
Manager, Environmental Services MA/VT  
Tighe & Bond, Inc.

## **SECTION 6 LABORATORY ANALYTICAL RESULTS Tighe&Bond**

---

### **6.1 DRILLING PROGRAM**

Drilling activities were performed by Technical Drilling Services, Inc, of Sterling Massachusetts under the observation of a Tighe & Bond environmental scientist. Drilling occurred on February 9, 2006. Soil borings were advanced using a Geoprobe vibratory direct push track mounted drill rig.

#### **6.1.1 Soil Boring Advancement**

Soil boring advancement for the drilling activities is described below. Descriptions of the soils encountered during site activities on February 9, 2006, are provided on the boring logs in Appendix E of this report.

Eleven Geoprobe soil borings were advanced at locations throughout the facility. Ten soils borings were advanced inside the building, three of which were completed as monitoring wells. One soil boring was advanced outside the building in the vicinity of the trench drain. The soil boring locations are shown on the Site Plan (Figure 4) in Appendix A. Boring Logs are included in Appendix E. One surficial soil samples was composited from locations around transformer T-1.

During soil boring advancement, soil samples were collected continuously in 5-foot intervals. The soil samples were used to characterize subsurface stratigraphy and were also field screened for the presence of VOCs and petroleum hydrocarbons, to identify potential soil contamination. The majority of these borings were advanced to a depth of ten feet or until refusal. Table 1 in Appendix G identifies all soil samples, boring and boring depths for samples submitted for confirmatory laboratory analysis. The Site Plan with Sampling Locations (Figure 4) is included in Appendix A.

#### **6.1.2 Monitoring Well Installation**

At the completion of the soil boring advancement on February 9, 2006, three of the borings were completed as 1" groundwater monitoring wells, identified as MW-1, MW-2 and MW-3 on the Site Plan (Figure 4). Please note that soil samples collected from these boring locations were labeled in the field and on the Chain of Custody as MW-1 (IB), MW-2 (IB) and MW-3 (IB), with the use of "IB" to indicate interior boring. However, the laboratory analytical report refers to these wells using "1B". In order to maintain consistency between the lab report and Site Plan (Figure 4 in Appendix A), these three wells are referred to as MW-1(1B), MW-2(1B) and MW-3 (1B). Well construction logs are included in Appendix E.

## **6.2 ENVIRONMENTAL SAMPLING PROGRAM**

Soil, groundwater, sediment, and surface water samples were collected for laboratory analysis during these site investigation activities. Details are provided in the following sections.

### **6.2.1 Soil (Surficial & Subsurface) Sampling & Analysis**

Subsurface soil samples collected on February 9, 2006 were screened in the field for the presence of volatile organic compounds (VOCs) with a Photovac Photo Ionization Detector (PID) equipped with a 10.2 eV lamp. The PID serves as a tool to measure the concentration of airborne organic, combustible gases and vapors (VOCs) in air in parts per million ranges (ppm), though it is not compound specific.

Samples were also screened in the field for the presence of total petroleum hydrocarbons (TPH) with a Dexsil PetroFlag Hydrocarbon Test Kit (Dexsil). The Dexsil instrument was set to a response factor of 5.0 for diesel fuel and gear oil, which is a conservative response setting for sites where limited information is known regarding petroleum usage.

Prior to screening soil samples, the instruments described above were calibrated to the manufacturers' specifications. The PID was calibrated to an isobutylene standard of 100.0 ppm. The Dexsil was calibrated at the beginning of the day. No errors were observed during the calibration process of each instrument.

Subsurface soils were screened in five-foot intervals in each of the eleven soil borings. A summary of subsurface soil field screening results is presented in the boring logs provided in Appendix E. Ten subsurface soil samples were submitted to Alpha for analysis of VOCs, semi-VOCs and Vermont Priority Pollutant Metals. On February 16, 2006 one surficial soil sample (T-1 Composite) was composited from 4 locations in the vicinity of transformer T-1 and submitted to Alpha for PCB analysis. Field data sheets are included in Appendix F.

Subsurface soil samples selected for laboratory VOC analysis were immediately prepared for submittal to Alpha to minimize the potential for volatilization of compounds. The appropriate mass of soil was placed in 40-millimeter volatile organic analysis (VOA) vials preserved with methanol and sodium bisulfate. The containers were labeled to correspond with the boring location and sample depth, then placed on ice.

All subsurface soil samples collected in the field were screened for the presence of TPH with the Dexsil. Elevated TPH screening concentrations were reported at various locations across the site. Elevated VOC screening concentrations were also reported at various locations across the site.



Based on the results of the Dextsil field screening, the five soil samples with the highest Dextsil results were submitted to Alpha for laboratory analysis of priority pollutant metals. The one (1) soil sample with the highest Dextsil reading was submitted to Alpha for laboratory analysis of polychlorinated biphenyls (PCBs). Based on the results of the PID field screening, the five soil samples with the highest PID results were submitted to Alpha for laboratory analysis of VOCs (Method 8260) and semi-VOCs (Method 8270). All soil samples were placed in the appropriate laboratory provided containers and labeled to correspond with the appropriate boring location and sample depth and placed on ice.

### **6.2.2 Groundwater Sampling & Analysis**

On February 16, 2006, Tighe & Bond personnel collected groundwater samples from the three interior groundwater monitoring wells installed on February 9, 2006. Tighe & Bond personnel gauged both depth to water and depth to bottom in each monitoring well. Groundwater Sample Collection Data sheets were completed for this sampling event.

Groundwater samples were collected using low-flow sampling procedures in general accordance with the EPA Region I *Low Stress (low-flow) Purging and Sampling Procedure* (June 30, 1996). The low-flow method was selected for groundwater sampling because this procedure minimizes the stress or disturbance within the wells during purging and sampling, which can improve data quality.

During low-flow purging of the well, an attempt was made to monitor field measurements for pH, reduction-oxidation potential (redox), dissolved oxygen (DO), specific conductance, and temperature using an Horiba® water quality meter and flow-through cell. An attempt was also made to measure turbidity with a LaMotte 2020 Turbidimeter. As outlined in EPA's guidance document, purging is considered complete and sample collection can begin when field parameters stabilize within acceptable ranges. Groundwater was pumped from the wells with a peristaltic pump at a rate of 150 milliliter per minute (ml/min). Pump intakes were set at approximate mid-points of each saturated screen interval in accordance with the procedures outlined at the above-referenced EPA guidance document.

Four groundwater samples were collected (including a duplicate from MW-1(IB)) and submitted to Alpha for Priority Pollutant Metals and VOCs. Please note that the MW-1 (IB) duplicate was only analyzed for Priority Pollutant Metals. All groundwater samples were placed in the appropriate laboratory provided containers and labeled to correspond with the appropriate sample location and placed on ice. The analytical laboratory report is included in Appendix H.

### **6.2.3 Sediment Sampling & Analysis**

On February 16, 2006, Tighe & Bond personnel collected two sediment samples (SED-3 and SED-4). All sediment samples were submitted to Alpha for analysis of Priority Pollutant Metals, VOCs and semi-VOCs. Sediment sampling locations are indicated on the Figure 4 Site Plan in Appendix A.

All sediment samples were placed in the appropriate laboratory provided containers and labeled to correspond with the appropriate sample location and placed on ice. The analytical laboratory report is included in Appendix H.

### **6.2.4 Surface Water**

On February 16, 2006, Tighe & Bond personnel collected two surface water samples from the unnamed stream, located along the northwest side of the building. One surface water sample (SW-2) was collected downstream of the culvert outfall near the north corner of the building, and one surface water sample (SW-1) was collected downstream of the trench drain outfall. Surface water samples were collected and submitted Alpha for analysis of Priority Pollutant Metals, VOCs and semi-VOCs.

All surface water samples were placed in the appropriate laboratory provided containers and labeled to correspond with the appropriate sample location and placed on ice. The Site Plan showing all sampling locations is included as Figure 4 in Appendix A

## **6.3 LABORATORY ANALYTICAL RESULTS**

Soil (subsurface and surficial), groundwater, sediment, and surface water samples, collected by Tighe & Bond personnel as part of this Site Investigation, were analyzed by Alpha Woods Hole Lab (Alpha) of Westborough, Massachusetts. Alpha is certified by the State of Vermont. All samples were placed in their appropriate containers and stored on ice for pickup or shipment to the laboratory. Laboratory analytical reports for all samples collected and submitted for analysis during this investigation are provided in Appendix H. The findings are summarized in the following sections.

The analytical results for soil samples were compared to EPA Region 9 PRGs, as applicable, to determine whether or not contaminants detected in the samples pose potential risks to human health and the environment. While DEC does not maintain compound-specific soil cleanup standards, they often defer to risk-based EPA standards for assessment purposes. DEC commonly refers to EPA Region 9 PRGs. In addition to PRGs, the soil results were compared to generic soil screening levels (SSLs) using a dilution-attenuation factor (DAF) of 20. The SSLs using a DAF of 20 were created to provide screening levels for the protection of groundwater under subsurface conditions that are conducive to dilution and attenuation of contaminants.



Groundwater analytical results were compared to the Enforcement Standards (ES) and Preventive Action Levels (PALs) set forth as the Vermont Primary Groundwater Quality Standards in *Chapter 12 of the Environmental Protection Rules: Groundwater Protection Rule and Strategy* (effective February 14, 2005).

Sediment analytical results were compared to the EPA Region 9 PRGs and the Ontario, Canada sediment screening values.

Surface water analytical results were compared to the Vermont Water Quality Standards, Appendix C: *Water Quality Criteria for the Protection of Human Health and the Aquatic Biota* (Effective July 2, 2000).

### 6.3.1 Soil Laboratory Analytical Results

As part of this investigation, ten subsurface soil samples were submitted to Alpha for analysis. Samples B-1(0'-5'), MW-1(IB)(0'-5'), B-1(5'-10'), B-5(5'-10'), and MW-1(IB)(5'-10') were analyzed for VOCs (Method 8260) and semi-VOCs (Method 8270). Samples B-3(0'-5'), B-6(5'-10'), MW-2(IB)(0'-5'), B-5(0'-5'), and B-4(5'-10') were analyzed for Priority Pollutant Metals. Sample B-3(0'-5') was additionally analyzed for polychlorinated biphenyls (PCBs). A summary of these analytical results is presented in Tables 1A and 1B in Appendix G.

Tables 1A and 1B summarizes the VOC, semi-VOC, Priority Pollutant Metal and polychlorinated biphenyls (PCB) soil analytical results. Soil analytical results are compared to the residential and industrial PRG standards.

The selection of soil samples for laboratory analysis was based on the field screening results; in general, samples from soil boring locations were selected based on the highest PID responses and/or Dexsil readings. (See Table 5, Appendix G for field screening data).

VOCs detected above the laboratory detection limit were limited to just 4-methyl-2-pentanone, n-Butylbenzene, Dichlorodifluoromethane, naphthalene, m&p-xylenes and o-xylene in B-5, 5'-10', and acetone in four of the soil samples. However, these positive detections were not reported at levels that exceeded the EPA Region 9 PRGs. All other VOCs, semi-VOCs and PAHs were reported below laboratory method detection limits (MDLs). Please note that some laboratory detection limits exceeded EPA Region 9 PRGs. A summary of soil analytical results is provided in Table 1A and 1B in Appendix G.

Five soil samples identified as B-3(0'-5'), B-6(5'-10'), MW-2(IB)(0'-5'), B-5(0'-5'), and B-4(5'-10') were submitted for Priority Pollutant Metals analysis. Metals detected include arsenic, chromium, copper, lead, nickel, and zinc. Arsenic was detected at concentrations that exceeded the applicable EPA Region 9 PRGs but at levels that are



likely consistent with naturally occurring arsenic levels in the State of Vermont as detailed in the U.S. Geological Survey Professional paper 1648, *Geochemical Landscapes of the Coterminous United States – New Map Presentations for 22 Elements* (2001). A summary of soil analytical results is provided in Table 1A and 1B in Appendix G.

Two soil samples identified as B-3(0'-5') and T-1 Composite were submitted for polychlorinated biphenyls (PCB) analysis. PCBs were not detected in either sample above laboratory detection limits. A summary of soil analytical results is provided in Table 1A in Appendix FG.

### **6.3.2 Groundwater Laboratory Analytical Results**

Four groundwater samples were collected from on-site monitoring wells identified as MW-1(IB), MW-2(IB), MW-3(IB), and Duplicate. A duplicate groundwater sample was collected from monitoring well MW-1(IB). Groundwater samples identified as MW-1(IB), MW-2(IB), and MW-3(IB), were submitted to Alpha for Priority Pollutant Metals, VOCs and semi-VOCs analysis. The groundwater sample identified as Duplicate, was submitted to Alpha for Priority Pollutant Metals analysis.

VOCs were not detected at levels above laboratory detecting limits. A summary of groundwater analytical results is presented in Tables 2A and 2B in Appendix G. Within the table, groundwater results are compared to applicable Vermont Primary Groundwater Quality Standards. The February 2004 Tighe & Bond Site Investigation Report prepared for the 222 Bowen Road property indicated that benzene had been detected in MW-2 (building exterior) at an estimated concentration of 0.6 ug/L. However, benzene was not detected above laboratory detection limits in any of the groundwater samples collected from MW-1(IB), MW-2(IB), MW-3(IB) for this site investigation.

Semi-VOCs were not detected at levels above laboratory detection limits. A summary of groundwater analytical results is presented in Tables 2A and 2B in Appendix G. Within the table, groundwater results are compared to applicable Vermont Primary Groundwater Quality Standards.

Metals detected include chromium, copper, lead, nickel, and zinc. Zinc was detected at levels that exceed Vermont Primary Groundwater Quality Standards. A summary of groundwater analytical results is presented in Tables 2A and 2B in Appendix G. Within the table, groundwater results are compared to applicable Vermont Primary Groundwater Quality Standards.

### 6.3.3 Sediment Laboratory Analytical Results

As part of this investigation, three sediment samples identified as SED-3, SED-4 and Trench Drain were submitted to Alpha for analysis of Priority Pollutant Metals and VOCs. A summary of these analytical results is presented in Table 4A in Appendix G.

Results were compared to the sediment screening levels (SSLs) developed by Ontario, Canada. EPA Region 9 PRGs are provided for the purpose of showing no potential health exposure risks to humans. VOCs were not detected in SED-2, SED-3 or Trench Drain and levels above laboratory detection limits.

Metals detected include arsenic, chromium, copper, lead, nickel, and zinc. Arsenic was detected at levels that exceed EPA Region 9 PRGs but at levels consistent with naturally occurring levels in Vermont. A summary of sediment analytical results is provided in Table 4A in Appendix G. Within the table, results are compared to the sediment screening levels (SSLs) developed by Ontario, Canada. Detected stream sediment metals concentrations did not exceed the SSLs. EPA Region 9 PRGs are also provided for the purpose of showing no potential health exposure risks to humans.

### 6.3.4 Surface water Laboratory Analytical Results

Two surface water samples, identified as SW-1 and SW-2, were collected from the unnamed stream. SW-1 was collected near the trench drain outfall; SW-2 was collected near the culvert outfall. The Site Plan showing all sampling locations is included in Figure 4 in Appendix A

Surface water samples were submitted to Alpha for analysis of VOCs, semi-VOCs and Priority Pollutant Metals. A copy of the laboratory analytical report is provided in Appendix H. A summary of surface water analytical results is presented in Table 3A and 3B in Appendix G. Within the table, surface water results are compared to applicable Vermont Water Quality standards, as provided in Appendix C of the *Water Quality Criteria for the Protection of Human Health and the Aquatic Biota* (Effective July 2, 2000).

Two surface water samples, identified as SW-1 and SW-2, were submitted for VOC analysis. No positive concentrations of VOCs were detected in either SW-1 or SW-2 surface water samples at concentrations above laboratory detection limits. A summary of surface water analytical results is provided in Table 3A and 3B in Appendix G. Within the table, results are compared to applicable Vermont Water Quality Standards.

Two surface water samples, identified as SW-1 and SW-2, were submitted for semi-VOC analysis. No positive concentrations of semi-VOCs were detected in either SW-1 or SW-2 surface water samples at concentrations above laboratory detection limits. A



summary of surface water analytical results is provided in Table 3A and 3B in Appendix F.

Two surface water samples, identified as SW-1 and SW-2, were submitted for Priority Pollutant Metals analysis. Metals detected above laboratory detection limits include copper and zinc. A summary of surface water analytical results is provided in Table 3A and 3B in Appendix F.

## **6.4 DATA VALIDATION**

Data validation has been conducted through an internal data review. This review consisted of an initial check to ensure that the laboratory analytical report was complete, and a review of laboratory QA/QC for the project, including trip blanks, method blanks, and surrogate samples. The field duplicate data and any major spike duplicate data have also been reviewed to assess precision and accuracy of the data.

A comparison of detection limits to the applicable PRG Risk Characterization Standards and the Vermont Primary Groundwater Quality Standards has also been conducted. The data have also been assessed relative to the site as a whole to determine how representative the data is overall. Please note that Alpha Analytical Laboratory has provided written correspondence regarding reasons why MDLs for some soil compounds exceed the applicable residential, industrial or DAF 20 PRGs. The Alpha letter is included in Appendix G.

As discussed in the following sections and presented in the attached laboratory analytical results reports, we believe the quality of the data prepared by Alpha is valid for use at this site.

### **6.4.1 Soil Laboratory Analytical Data**

Priority Pollutant Metals analytical results are discussed below. Positive detections of Chromium, copper, Lead, Nickel, and Zinc were detected in samples B-3(0'-5'), B-6(5'-10'), MW-2(IB)(0'-5'), B-5(0'-5'), and B-4(5'-10') above laboratory MDLs, but below applicable EPA Region 9 PRGs. Arsenic was detected above applicable EPA Region 9 PRGs in samples B-3(0'-5'), B-6(5'-10'), MW-2(IB)(0'-5'), B-5(0'-5'), and B-4(5'-10').

VOC and semi-VOC analytical results are discussed below. No positive detections above laboratory MDLs were detected in samples B-1(0'-5'), MW-1(IB) (0'-5'), B-1(5'-10'), and MW-1(IB) (5'-10'). Positive detections of Napthalene, m&p-Xylenes, and o-Xylene were detected in sample B-5(5'-10') above laboratory MDLs, but below applicable EPA Region 9 PRGs. No SVOCs were detected above laboratory MDLs in samples B-1(0'-5'), MW-1(IB) (0'-5'), B-1(5'-10'), B-5(5'-10'), and MW-1(IB) (5'-



10'). However, the laboratory MDLs for Benzidine, Hexachlorobenzene, Bis(2-chloroethyl)ether, 1,4-Dichlorobenzene, 3,3'-Dichlorobenzidine, n-Nitrosodi-n-propylamine, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Nitrosodi-n-butylamine, n-Nitrosodimethylamine, and Benzo(a)pyrene exceeded applicable EPA Region 9 PRGs.

#### **6.4.2 Groundwater Laboratory Analytical Data**

A duplicate groundwater sample was collected and identified as "Duplicate," a duplicate of the sample collected at monitoring well MW-1(IB). Zinc was detected at a slightly higher concentration in the "Duplicate" groundwater sample. (7.0 ug/L) than MW-1(IB) (6.4 ug/L). All other analytical results from MW-1(IB) and Duplicate were similar. Consultation with the laboratory indicates that the likely cause of this discrepancy can be attributed to non-homogenous samples submitted for laboratory analysis.

Priority Pollutant Metals analytical results are discussed below. Positive detections of chromium and copper were detected in samples MW-1(IB) and MW-3(IB) below Vermont Primary Groundwater Quality Standards. Positive detection of lead and nickel were detected in sample MW-1(IB) below Vermont Primary Groundwater Quality Standards. Silver was not detected in any groundwater sample above MDLs; however the MDL exceeded the applicable ES and PAL. Zinc was detected in all three groundwater samples at concentrations above the applicable ES and PAL. With the exceptions noted above, laboratory MDLs for metals met Vermont Groundwater ES and PAL concentrations.

VOC and semi-VOC analytical results are discussed below. No positive detections were detected in samples MW-1(IB), MW-2(IB), and MW-3(IB). The laboratory MDLs for samples MW-1(IB), MW-2(IB), and MW-3(IB) for 1,2,3-Trichloropropane, 1,2-Dichloropropane, 1,3-Dichloropropane, Hexachlorobutadiene, Methylene chloride, Vinyl Chloride, Hexachlorobenzene, Hexachlorobutadiene, Benzo(a)pyrene, Pentachloronitrobenzene, and Pentachlorophenol met or exceeded the applicable Vermont Primary Groundwater Quality ES and PAL standards.

#### **6.4.3 Sediment Laboratory Analytical Data**

Priority Pollutant Metals analytical results are discussed below. Cadmium, chromium, copper, lead, nickel and zinc were detected in sample Trench Drain above laboratory MDLs, but below Residential and Industrial EPA Region 9 PRGs. Arsenic was detected in sample Trench Drain above Residential and Industrial EPA Region 9 PRGs. Chromium, copper, lead, nickel, and zinc were detected in sample SED-3 above laboratory MDLs, but below Residential and Industrial EPA Region 9 PRGs. Arsenic was detected in sample SED-3 above Residential and Industrial EPA Region 9 PRGs. Chromium, copper, lead, nickel, thallium, and zinc were detected in sample SED-4

above laboratory MDLs, but below Residential and Industrial EPA Region 9 PRGs. Arsenic was detected in sample SED-4 above Residential and Industrial EPA Region 9 PRGs.

VOC analytical results are discussed below. Compounds were not detected above laboratory MDLs in sample Trench Drain. However, laboratory MDLs for 1,2,3-Trichloropropane, 1,2-Dibromomethane, 1,2-Dichloropropane, Acrolein, Acrylonitrile and Trichloroethane(TCE) for sample Trench Drain exceeded applicable EPA Region 9 PRGs. Compounds were not detected in sample SED-3 above laboratory MDLs. However, laboratory MDLs for 1,2,3-Trichloropropane, 1,2-Dibromoethane, 1,2-Dichloroethane, 1,2-Dichloropropane, Acrolein, Acrylonitrile, and Trichloroethane(TCE) exceeded applicable EPA Region 9 PRGs. Compounds were not detected in sample SED-3 above laboratory MDLs in sample SED-4. However, laboratory MDLs for 1,2,3-Trichloropropane, 1,2-Dibromoethane, 1,2-Dichloroethane, 1,2-Dichloropropane, Acrolein, Acrylonitrile, and Trichloroethane(TCE) exceeded applicable EPA Region 9 PRGs.

#### **6.4.4 Surface water Laboratory Analytical Data**

Priority Pollutant Metals analytical results are discussed below. Zinc was the only compound detected above laboratory MDLs in sample SW-1. However, laboratory MDLs for Arsenic and Mercury for sample SW-1 Vermont Water Quality Standards. No compounds were detected above laboratory MDLs in sample SW-2. However, laboratory MDLs for Arsenic and Mercury for sample SW-2 exceeded applicable Vermont Water Quality Standards.

VOC and semi-VOC analytical results are discussed below. No compounds in sample SW-1 were detected above the laboratory MDL. However, laboratory MDLs for some compounds exceeded the applicable surface water standards.

Deviations from the December 30, 2005 Work Plan are described in the following section.

### **7.1 SEMI-VOC ANALYSIS**

Sediment samples from the unnamed stream and the trench drain were collected on February 16, 2006. All samples were received by Alpha on February 16, 2006 for laboratory analysis. On February 20, 2006 Alpha informed Tighe & Bond that excessive amounts of sediment were placed into semi-VOC samples Trench Drain, SED-3 and SED-4. The excessive soils in each sample container prevented Alpha from accurately performing semi-VOC analysis. Therefore, semi-VOC analyses were not performed.



## SECTION 8 CONCLUSIONS - ENVIRONMENTAL SITE INVESTIGATION

---

**Tighe&Bond**

### 8.1 CONCLUSIONS

Tighe & Bond has completed this Site Investigation report for the U.S. Tsubaki facility located at 222 Bowen Road in Bennington, Vermont. The investigation was conducted to address potential risk of harm to human health and the environment and was completed as part of Phase II Site Investigation activities for U.S. Tsubaki. This investigation was performed in general accordance with the January 6, 2006 Work Plan, except where noted in Section 7.

Given the findings of the site investigation activities, Tighe & Bond presents the following conclusions with respect to environmental conditions existing at the time of our investigation:

- **Soil:** Zinc was detected in soil samples collected from the ground surface to a depth of approximately ten feet below surface grade at concentrations ranging between 33 mg/kg in the subsurface soil sample identified as MW-2(IB)(0'-5') and 11 mg/kg in the subsurface soil samples identified as B-3(0'-5') and B-6(5'-10'). These concentrations do not exceed the EPA Region 9 PRGs for residential or industrial soils.
- Arsenic was detected in soil samples collected from the ground surface to depths of approximately ten feet below surface grade at concentrations ranging between 1.4 mg/kg in the subsurface soils sample identified as B-6(5'-10') and 2.5 mg/kg in the subsurface soil sample identified as MW-2(IB)(0'-5'). Five of these concentrations exceed the EPA Region 9 PRGs for residential soils, while B-3(0'-5'), MW-2(IB)(0'-5') and B-5(0'-5') arsenic concentrations exceed EPA Region 9 PRGs for industrial soils

The highest concentration of arsenic was detected in the surficial soil sample (MW-2(IB)(0'-5')) at a concentration of 2.5 mg/kg, which is below the DAF-20 standard for arsenic. Arsenic was not detected in groundwater samples collected from MW-2(IB). As such, there is no evidence to suggest that arsenic present in surficial soil at this site is impacting groundwater quality.

According to U.S. Geological Survey Professional Paper 1648, *Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements* (2001), a geochemical map of Vermont indicates that arsenic is present in soils ranging between 3.1 and 6.3 in the region of Bennington, Vermont. During the advancement of soil borings at the site, no evidence of other potential arsenic sources such as urban fill were noted. Given the geochemical dispersion pattern of arsenic indicated in the map, our conclusion that the

arsenic is present in site soils is consistent with typical naturally occurring arsenic levels in Vermont soils.

Total metals detected in soils include arsenic, chromium, copper, lead, nickel, and zinc. Aside from arsenic discussed above, Priority Pollutant metals were not detected in site soils at concentrations above the EPA Region 9 PRGs. All other metals were reported below MDLs (which were determined to be below EPA Region 9 PRGs).

VOC concentrations detected in soil were not reported at levels that exceeded the EPA Region 9 PRGs. All other VOCs were reported below laboratory method detection limits (MDLs) (which were determined to be below EPA Region 9 PRGs).

- Semi-VOCs were not detected in soil above laboratory method detection limits (MDLs).
- **Groundwater:** Zinc was detected in site groundwater ranging between 6.4 mg/L in groundwater sample MW-1(IB) and 7.9 mg/L in groundwater sample MW-2(IB). All of these concentrations exceed Vermont ES and PAL standards. However, as discussed below, zinc concentrations in stream sediment and surface water were not detected at concentrations that pose a risk to aquatic receptors.
- Total metals detected in site groundwater include chromium, copper, lead, and nickel. However, these positive detections were not reported at levels that exceed the Vermont ES and PAL standards. Silver was not detected above laboratory MDLs.
- VOCs were not detected in groundwater samples above laboratory MDLs.

**Sediment:** Total metals detected in site sediment samples SED-3, SED-4 and Trench Drain includes arsenic, chromium, copper, lead, nickel, and zinc. However, these positive detections were not reported at levels that exceed EPA Region 9 PRGs or Ontario Sediment Quality Guidelines, with the exception of arsenic. Arsenic was detected in all three sediment samples, between 3.1 mg/kg in sample SED-3 and 6.5 mg/kg in sample Trench Drain. The stream channel sediment concentrations do not exceed the Ontario SSLs, indicating that arsenic levels in the stream do not pose a risk to aquatic receptors. Zinc concentrations in the stream channel sediments also do not exceed the Ontario benchmark standards, indicating that although zinc was found in groundwater at concentrations exceeding VT GES, it is not discharged to the stream at levels that constitute risk to aquatic receptors.



VOCs were not detected in any of the three site sediment samples above laboratory MDLs. These compound-specific results indicate that the total petroleum hydrocarbon (TPH) concentrations detected in stream sediments by Tighe & Bond in its 2004 site investigation are unlikely to be posing a risk to aquatic receptors.

**Surface water:** Zinc was detected in surface water sample SW-1 at a concentration of 12.0 ug/L. As discussed below in Section 8-2, this concentration does not pose a risk to aquatic receptors. No other metals were detected in site surface water samples above laboratory method detection limits. VOCs and semi-VOCs were not detected in site soils above laboratory MDLs.

In conclusion, arsenic was the only compound detected at concentrations that exceeded the applicable EPA Region 9 PRGs for soil. Zinc was the only compound detected at concentrations that exceeded applicable Vermont Primary Groundwater Quality Standards. Arsenic was detected in surficial and subsurface soils, at depths ranging between zero to 10 feet below surface grade, but at concentrations well below the DAF 20 standard and at levels considered to be consistent with naturally occurring arsenic levels for Vermont. Arsenic was also detected in the two stream sediment samples at similar concentrations.

Although zinc was detected in groundwater samples at concentrations exceeding the VT GES, it was not found in nearby sediment or surface water at concentrations considered to pose a risk to aquatic receptors. Zinc concentrations in site soils do not exceed residential PRGs and, thus, do not represent an exposure risk. Groundwater at the site, and nearby, is not used as a source for drinking water and, thus, is not considered a complete exposure pathway constituting risk.

## **8.2 CORRECTIVE ACTION FEASIBILITY INVESTIGATION**

Based on a review of laboratory analytical results obtained during this Phase II site investigation, a Corrective Action Feasibility Investigation (CAFI), including a risk screening assessment, is not necessary for the property located at 222 Bowen Road, Bennington, Vermont.

Although zinc was detected at concentrations that exceeded groundwater Enforcement Standards, zinc was detected in subsurface soil at concentrations below the applicable PRGs and in trace amounts in sediment. Zinc was also detected in surface water (SW-1) (12 ug/L). However, according to the U.S. EPA National Recommended Water Quality Criteria, this detection is well below the Vermont water quality standards for zinc pertaining to protection of human health (consumption of water & organisms=7,400 ug/L, and consumption of organisms only = 26,000 ug/L). Additionally, concentrations of zinc detected in surface water in the unnamed stream



are also well below Vermont water quality standards for aquatic biota (freshwater acute criteria = 120 ug/L, freshwater chronic criteria = 120 ug/L).

It is important to note that freshwater criteria for zinc are expressed as a function of hardness (mg/L) in the water column. The 120 ug/L value expressed above corresponds to a hardness value of 100 mg/L. No data regarding hardness was collected at the time that surface water samples SW-1 and SW-2 were collected. If the hardness value of the unnamed stream were less than 100 mg/L, the criterion would be less than 120 ug/L. However, even if one were to conservatively assume that surface water in the unnamed stream had a hardness value of 10 mg/L, freshwater acute and chronic criteria would be 17 ug/L and 16 ug/L, respectively. These values are still greater than the concentration of zinc detected in the unnamed stream. If hardness were measured at 10 ug/L, values for protection of human health would be 9,100 ug/L for consumption of water and organisms, and 69,000 ug/L for consumption of organisms only.

Data presented in this report and previous submittals have documented that there are no groundwater impacts from historical releases in these areas of the site that will need corrective action measures. Therefore, no corrective action technologies were reviewed relative to groundwater remediation.

Although we have concluded, based upon the results of this environmental investigation, that corrective actions are not necessary for soils, groundwater, surface water and sediment at this site, it is our recommendation that the potential purchaser of the 222 Bowen Road property amend the current stormwater conveyance system (trench drain discharge to the un-named stream) in order to minimize the potential for future releases/ impact to that stream.

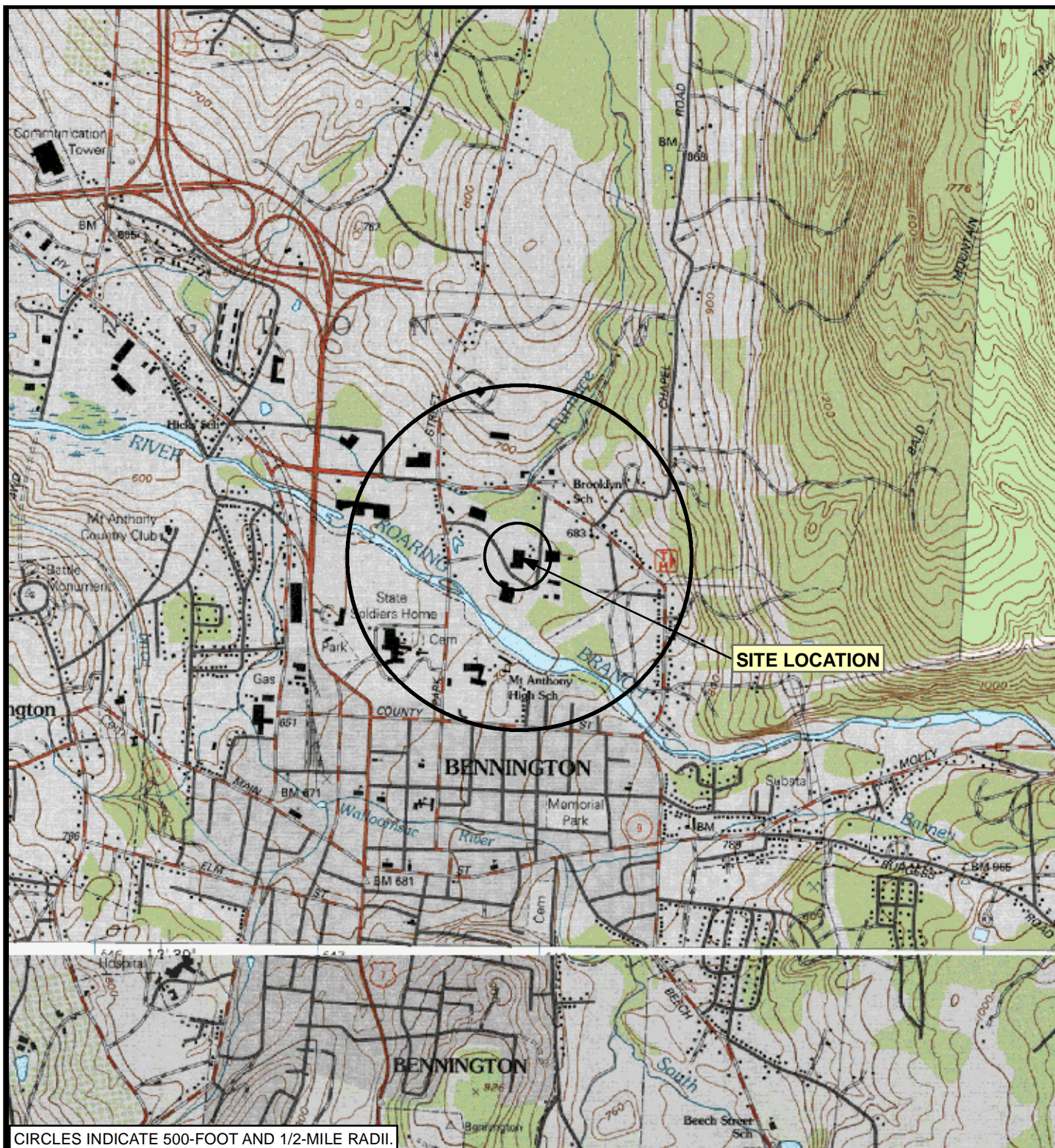
Depending upon the future use of the building on the 222 Bowen Road property, it is also recommended that the potential purchaser consider closing the three open floor drains remaining in the facility, in accordance with Vermont DEC's Underground Injection Control Program requirements.

## SECTION 9 REFERENCES

- Bennington, Town of. Clerk's Office. Records reviewed November 14, 2005.
- Bennington, Town of. Assessor's Office. Available records reviewed November 14, 2005.
- Bennington, Town of. Department of Health and Building Department visited November 14, 2005.
- Bennington, Town of. Assessor's Office. Bennington, VT Parcel Plan, Map 45.
- Bennington, Town of. Assessor's Office. Commercial Valuation, 1986-2000.
- Bennington Country Regional Commission, 222 Bowen Road, Bennington, Vermont Orthophoto Image (Flown in May 2000).
- Federal Emergency Management Agency Flood Insurance Rate Map. Community-Panel Number 500013 0005 C, effective June 17, 1986.
- FirstSearch Technology Corporation. *Environmental FirstSearch Report, 222 Bowen Road, Bennington, Vermont*. February 6, 2006.
- State of Vermont, Department of Environmental Conservation. Files reviewed February 14, 2006.
- Vermont Center for Geographical Information Data Map. February 2006.
- Vermont Department of Water Resources with the USGS, *Ground Water Favorability Map of the Batten Kill, Walloomsac River and Hoosic River Basins*, dated 1966.
- Vermont Geological Survey, *Centennial Geologic Map of Vermont*, 1:500,000 scale dated 1961.
- Vermont Geological Survey, *Surficial Geologic Map of Vermont*, 1:500,000 scale dated 1970.
- Vermont Mapping Program, Orthophoto # 096040, 1:2,400 scale, Flown in May 2000.

J:\B\B0360\Report\Ph I Update\_Ph II\report.doc





CIRCLES INDICATE 500-FOOT AND 1/2-MILE RADII.

BASED ON USGS TOPOGRAPHIC MAPS FOR  
BENNINGTON & POWNAL VT  
REVISED 1997  
NORTH POWNAL, HOOSICK FALLS NY-VT  
QUADRANGLES REVISED 1995  
20-FOOT CONTOURS



## FIGURE 1 SITE LOCUS

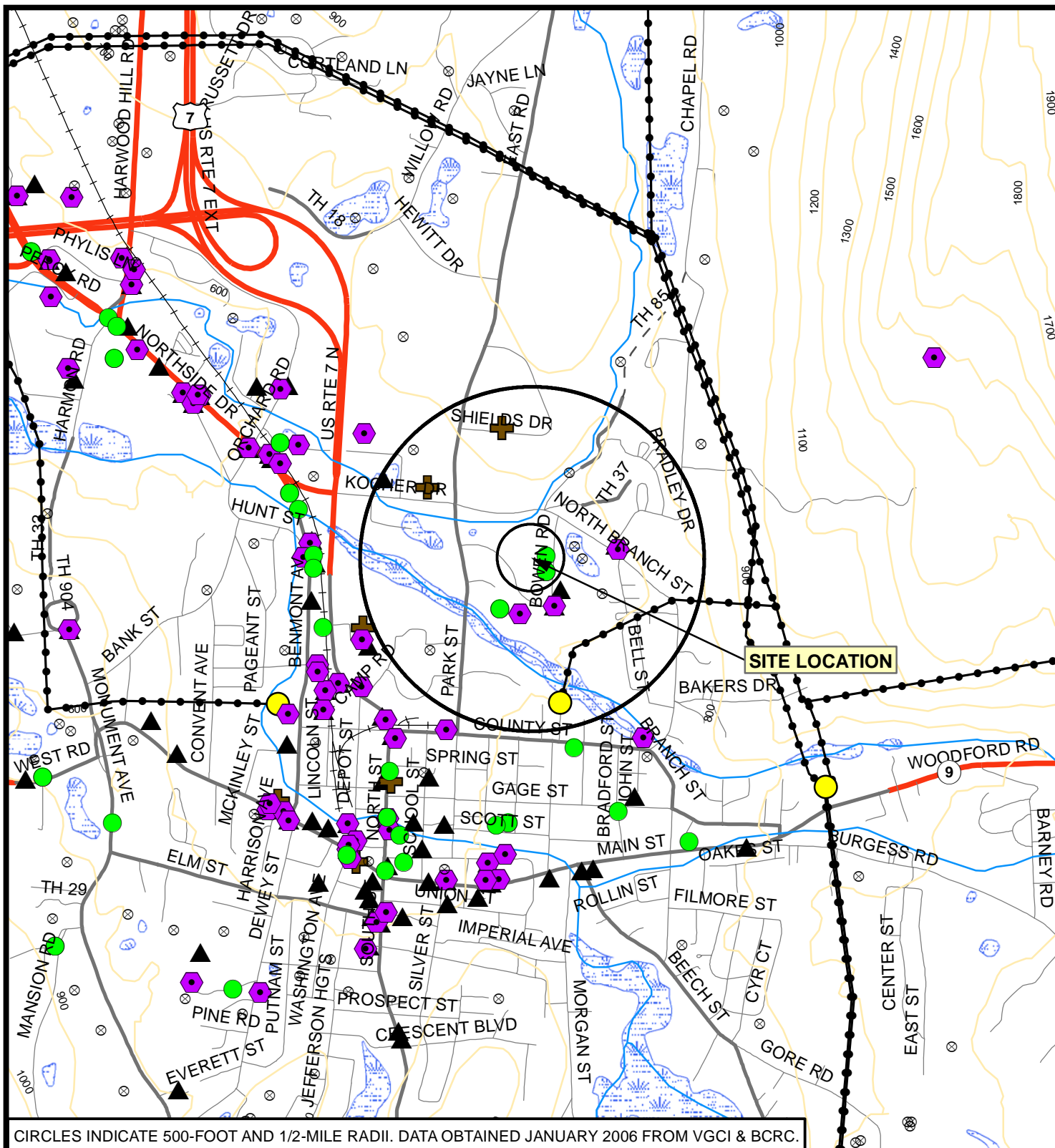
US TSUBAKI  
222 BOWEN ROAD  
BENNINGTON, VERMONT

**Tighe & Bond**

SCALE 1:25,000

FEBRUARY 2006





CIRCLES INDICATE 500-FOOT AND 1/2-MILE RADII. DATA OBTAINED JANUARY 2006 FROM VGCI & BCRC.

#### Legend

- ⊗ Private Well (VTANR)
- ⊕ Hazardous Wastes Generator (VTDEC & USEPA)
- ⬢ U.S. EPA Regulated Facility
- Hazardous Waste Site (VTANR)
- ▲ Underground Storage Tank (VTANR)
- Solid Waste Site (BCRC)
- Utility Substation
- Power Line
- Railroad
- 100 ft Contour
- Rare Threatened & Endangered Species & Significant Communities
- Stream or River
- Limited Access Highway
- Multi-Lane Highway, NOT Limited Access
- Other Numbered Highway
- Major Road - Connector; 1
- Minor Street or Road
- Track or Trail
- Lake
- Basin Boundary
- Wetland
- Town Boundary



## FIGURE 2 BASE PLAN

US TSUBAKI  
222 BOWEN ROAD  
BENNINGTON, VERMONT

**Tighe&Bond**

SCALE 1:25,000

Page 45 of 48 MARCH 2006

HRS Reference #109

V:\Projects\B\B0360\gis.mxd



**Figure 3**  
**Aerial Map**  
**U.S. Tsubaki**  
**222 Bowen Rd**  
**Bennington, Vermont**



500 0 500 Feet



Orthophoto # 096040  
Flown in May 2000

Scale 1:2,400

Map prepared Feb. 21, 2006 by BCRC.



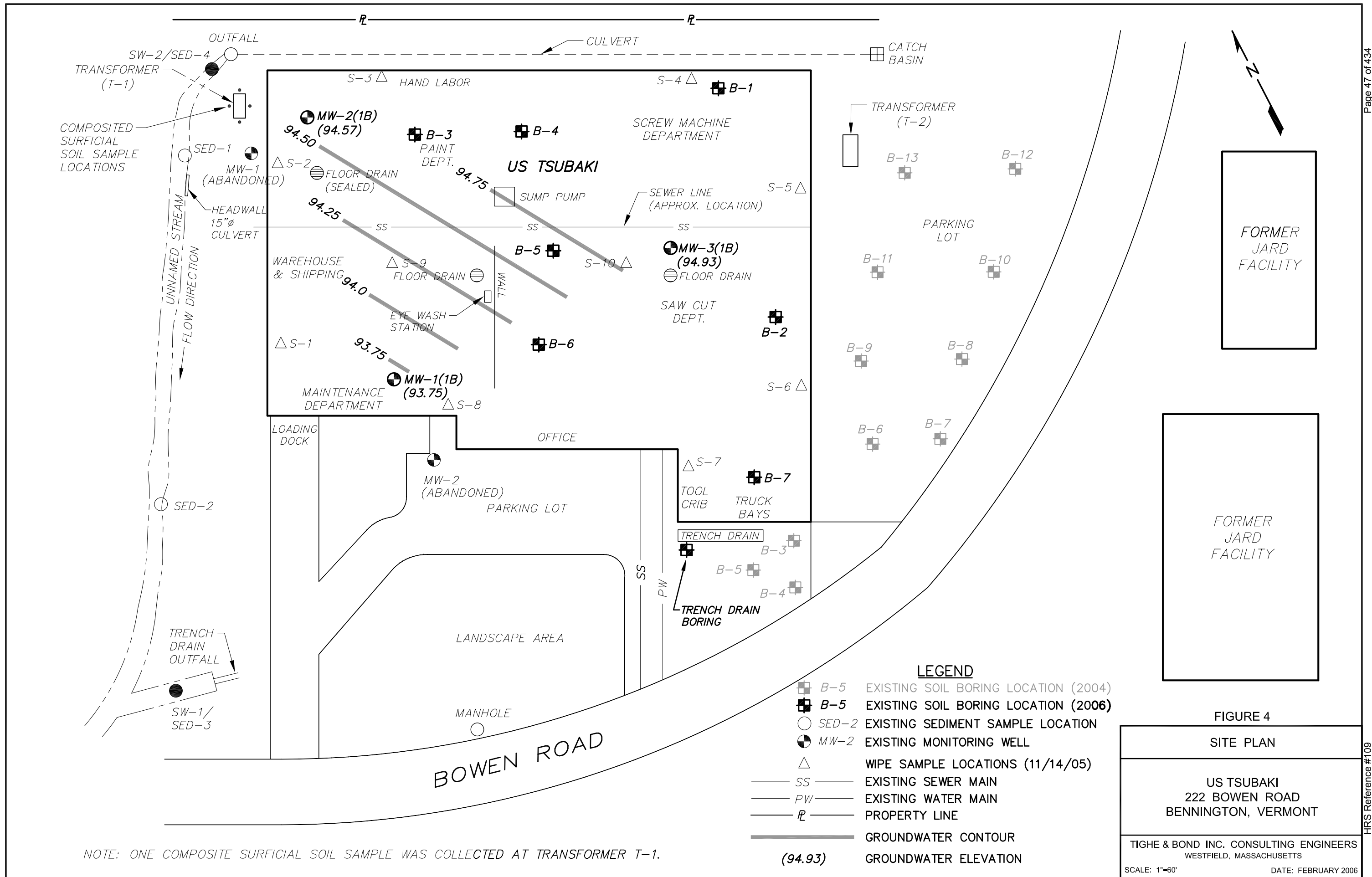
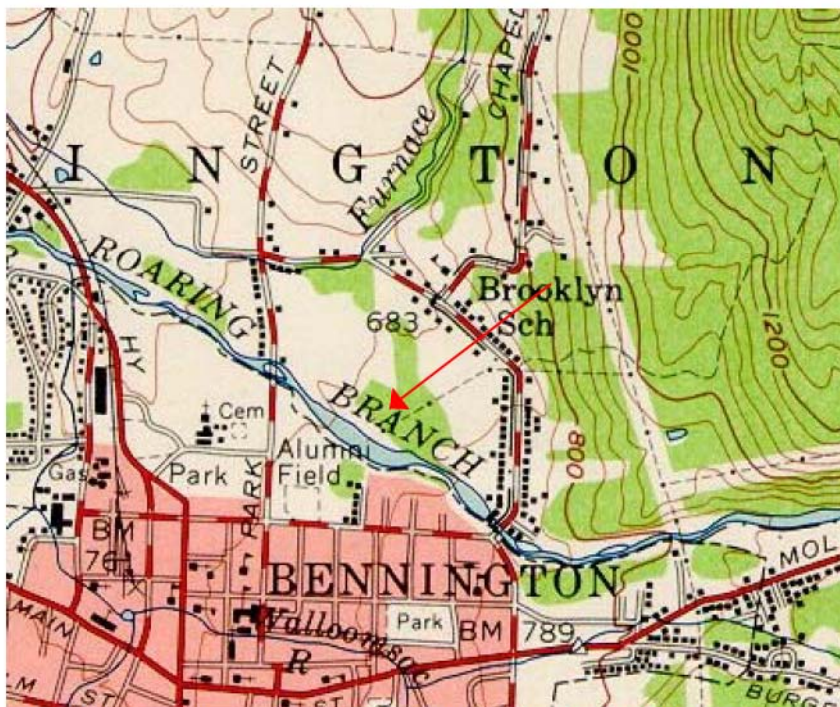
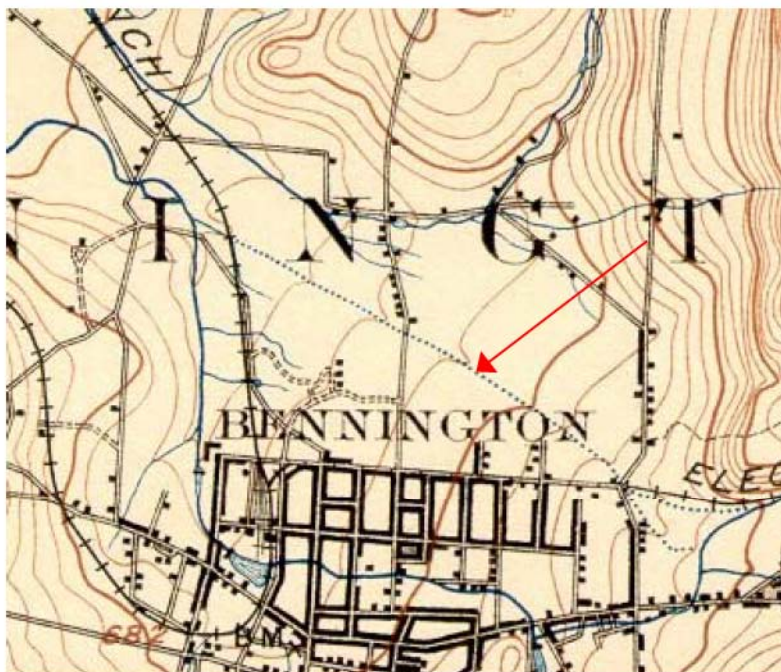




Figure 5  
 Historic Topographic Maps  
 Bennington, VT Quad (USGS 15 min series)

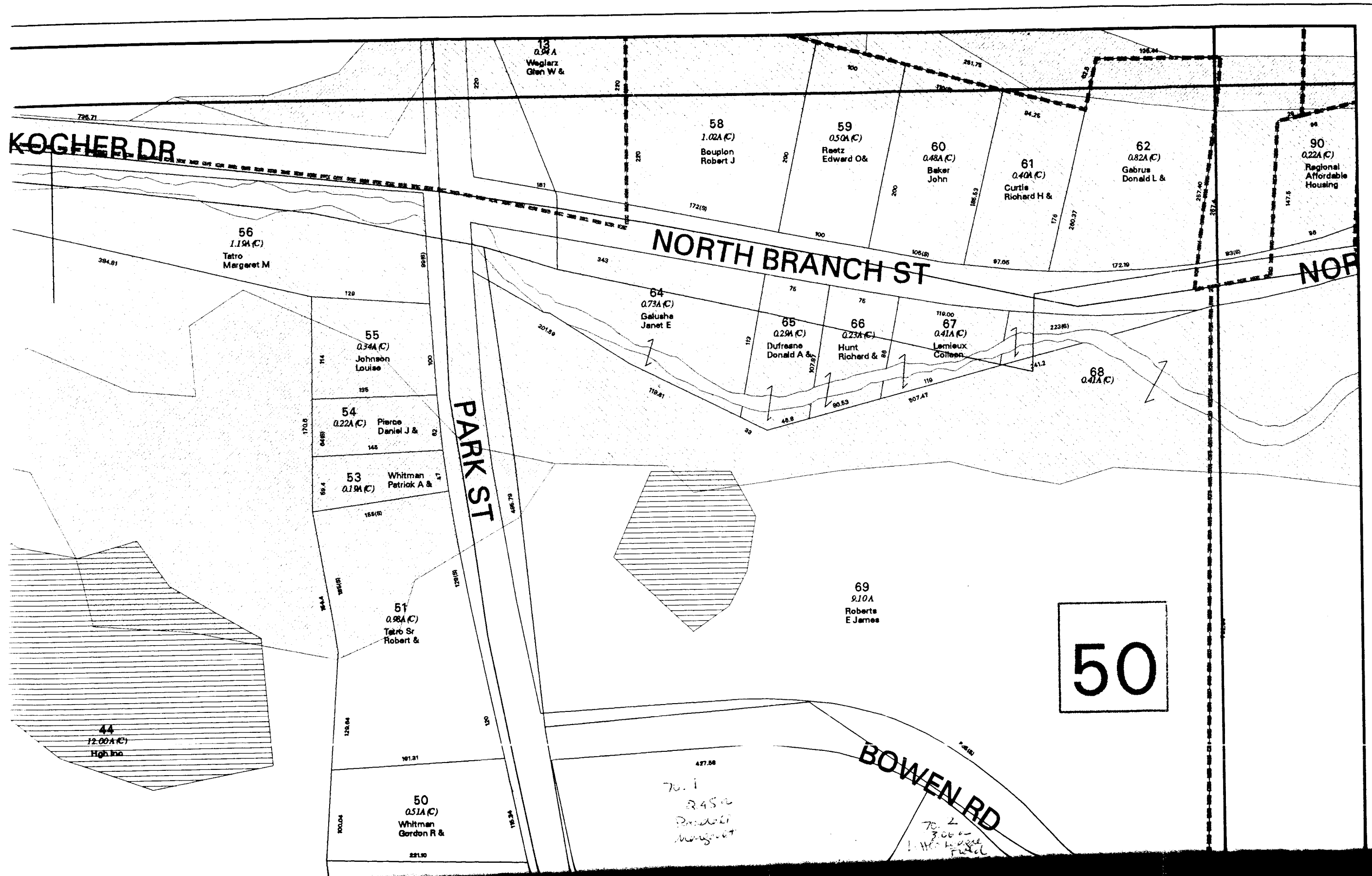


1954 Historic Topo, Bennington, VT Quad (USGS 15 min series)



1898 Historic Topo (Reprint 1920), Bennington, VT Quad

Note: The U.S. Tsubaki facility located at 222 Bowen Road is not present on either the 1898 or 1954 historic topographic maps. Source: <http://docs.unh.edu/nhtopos/Bennington.htm>



NORTH BRANCH ST

HRS Reference #109

3  
1.01A(C)  
Kinney  
Robert J &

4  
0.51A(C)  
Solari  
Joseph A

84.2  
0.80A  
Dupree  
Ray &

85  
8.91A(C)  
Roberts  
E James

84.1  
1.07A(C)  
Vachon  
Richard H &

83  
0.39A(C)  
Gates  
Terry L

82  
0.31A(C)  
Main  
Brian &

81  
0.39A(C)  
Werner  
Eunice M

80  
0.31A(C)  
Roberts  
Lawrence E

79  
0.51A(C)  
McHale  
Jennette B

78  
5.38A(C)  
U S Teubaki Inc

71  
12.48 A  
Vermont Container Corporation

72  
8.00A(C)  
Vermont State Highway

73  
Jard Corp  
34.16 ac



BENNINGTON, VERMONT (ASSESSMENT YEAR 1994)

PARCEL NO: 45-01-78-00

CLASS: I ST CLS - 08

ROUTING NO:

CARD 1 OF 1

OWNER NAME: U S TSUBAKI INC

PROPERTY ADDRESS: 222 BOWEN RD

NBHD: 8.00

LAND DATA AND COMPUTATIONS

LAND TYPE	ACT FRONT SQFT/ACRE	EFFECTIVE DEPTH	DEPTH FACTOR	EFFECTIVE FRONT	UNIT PRICE	INFLUENCE(INF)FACTOR			LAND VALUE
						INF FACTOR 1	INF FACTOR 2	INF%	
PRIMARY	5.380				25,828			0%	138,956
GROSS TYPE: 0									0
Sound Value Flag = 0								LAND VALUE:	139,000

BUILDING OTHER FEATURES

LINE	STRUCTURE CODE	FLAT	MEAS-1	MEAS-2	ID	UNITS	UNITS	RATE/COST	RCN
1	SS1-SPRINK WET		74796	0 1	1	SQFT		1.82	136,130
1	CW1-CRANEWAYS		190	0 1	1	LNFT		45.54	8,650
1	CW1-CRANEWAYS		246	0 1	1	LNFT		45.54	11,200
1	OD4-OVHD MTR ST		10	0 14	3	SQFT		30.28	12,720

INTERIOR-EXTERIOR DATA

BLDG NO: 1

YEAR BUILT: 1980

NO. OF UNITS: 0

STRUCTURE TYPE : 401-MANUFAC PROCESSING

GRADE: C

IDENT UNITS: 1

BASIC TYPE CODE: 4

SEC	LEVELS	DIMENSIONS	USE TYPE	PERM HT	WALLS	CONS	IN%	PTNS	H/A	PLMB	SF	RATE	RCN	PHYS FUNC	%GD	RCNLD
1	01	01 1	72596 044-LGHT MANUFACT	1172	20 METAL-LIGH	2	100	NORM	3/0	NORM	30.09	2,353,110	NORM	NORM	75	1,764,830
1	M1	M1 1	2200 085-ENCLOSURE	248	8 ENCLOSURE	1	100	NORM	1/0	NORM	28.57	62,850	NORM	NORM	75	47,140
1	01	01 1	6256 085-ENCLOSURE	364	8 ENCLOSURE	1	100	NORM	1/0	NORM	45.05	281,830	NORM	NORM	75	211,370
														UNADJ. TOTAL RCN		2,697,790
														AVG. %GOOD		0.75
														UNADJ. TOTAL RCNLD		2,023,340
														GRADE FACTOR X		1.00
														TOT. BLDG. RCNLD		2,023,340
														IDENTICAL UNITS X		1
														ECON. COND FACTOR X		0.75
														TOTAL RCNLD		1,517,510

MEMO  
U.S. TSUBAKI

YARD IMPROVEMENTS AND/OR SECONDARY BUILDINGS

STRUCTURE CODE	FLAT	SIZE1	SIZE2	ID	UNITS	UNITS	RATE/COST	RCN	YEAR	PHYS COND	FUN CD	%GD	RCNLD		
PA1-ASPH PARKIN		1	35900	1	SQFT		1.24	44,426	1980	NORMAL	NORMAL	0.50	22,210		
OTHER IMPROVEMENT:													0		
													TOTAL OBY VALUE	22,210	
													LAND	VALUE	139,000
													BLDG	VALUE	1,539,700
													TOTAL	VALUE	1,678,700

PRIOR VALUE      COST VALUE

LAND VALUE	139,000	139,000
BLDG VALUE	1,703,100	1,539,700
TOTAL VALUE	1,842,100	1,678,700

TOTAL COST / SQFT = 20.71  
HRS Reference #109

BENNINGTON, VERMONT (ASSESSMENT YEAR 1994)

PARCEL ID NO: 45-01-78-00

CLASS I ST CLS - 08

OWNER NAME: U S TSUBAKI INC

PROPERTY ADDRESS: 222 BOWEN RD

NBHD: 8.00

STRUCTURE CODE = 401 ASSIGNED TO MODEL TYPE = 12

MODEL ADJUSTMENTS: INCOME PSF \$ 4.50 x 0.83 = 3.74 EXPENSE PSF \$ 0.60 x 0.00 = 0.60 CAP OVERRIDE = 0.000

INCOME PORTION:				EXPENSES PORTION:			
xx 12-MANUFACTURING				MODEL GROUP NUMBER 1			
GROSS LEASABLE	72,596	X	3.74 X 1.00	=	271,146		
COVERED PARKING	0	X	0	=	0		
PARKING	0	X	0	=	0	AGE FACTOR ( 14 YEARS = 1.00 )	
POTENTIAL GROSS INCOME				=	271,146	EXPENSES 0.60 x 1.00 = 0.60 + 0.00(U) = 0.60	
PERCENT OCCUPANCY				X	90%	72,596 SF x 0.60 = 43,558	
EFFECTIVE GROSS INCOME				=	244,032		
EXPENSES: PSF TOTAL				=	43,558		
EXPENSES: MGMNT OR OPER	0%	OF EFF. GROSS		=	0	AGE FACTOR 1.00 x EXPENSES 0 = 0	
TOTAL EXPENSES				=	( 43,558)		
NET INCOME				=	200,474		
TOTAL NET INCOME				=	200,474		

INCOME CAPITALIZATION

EQUITY RATIO 1.00 x CASH ON CASH 0.1000 = 0.1000

DISTRICT 0 EFFECTIVE TAX RATE = 0.0200

DIVIDED BY TOTAL CAPITALIZATION RATE = 0.1200

NET INCOME 200,474 @ 0.1200

VALUE, INCOME APPROACH 1,670,617

RESIDUAL LAND 0

ADJUSTED VALUE, INCOME APPROACH 1,670,617

AVG 23.01 PER BLDG SQFT ( 72,596 EXCLD PARKING) GROSS RENT MULTIPLIER = 6.8

VALUE SUMMARY - PARCEL

	CURRENT VALUE	PRIOR VALUE	COST VALUE	INCOME VALUE	ASSESSMENT RATIO = [1.00]
LAND VALUE	139,000	139,000	139,000	139,000	
BLDG VALUE	1,539,700	1,703,100	1,539,700	1,531,600	
TOTAL VALUE	1,678,700	1,842,100	1,678,700	1,670,600	
VALUE FLAG	5 = COST				

010	PARCEL ID	45-01-78-00	CARD 1 of 1	110	PROP ADDRESS	119	BOWEN RD	949	VAL OVRD	0
040	OWNER NAME 1	U S TSUBAKI, INC		100	STATE CLASS	08	106 ENTRANCE	0	953 OVRD REASON	0
045	OWNER NAME 2			011	ACCT #		107 INFO CODE	3	954 OVRD DATE	0
050	STREET	119 BOWEN ROAD		103	LIVING UNITS	0	115 PARTIAL FLAG		955 VAL OVRD ID	
060	CITY/STATE	BENNINGTON, VT	05201	105	NEIGHBORHOOD	8	111 ZONING I	MULTI	N/C	
				101	DISTRICT	2	LAST UPDATE	5/11/1994	104 PRINT CHANGE	7

[illegible]

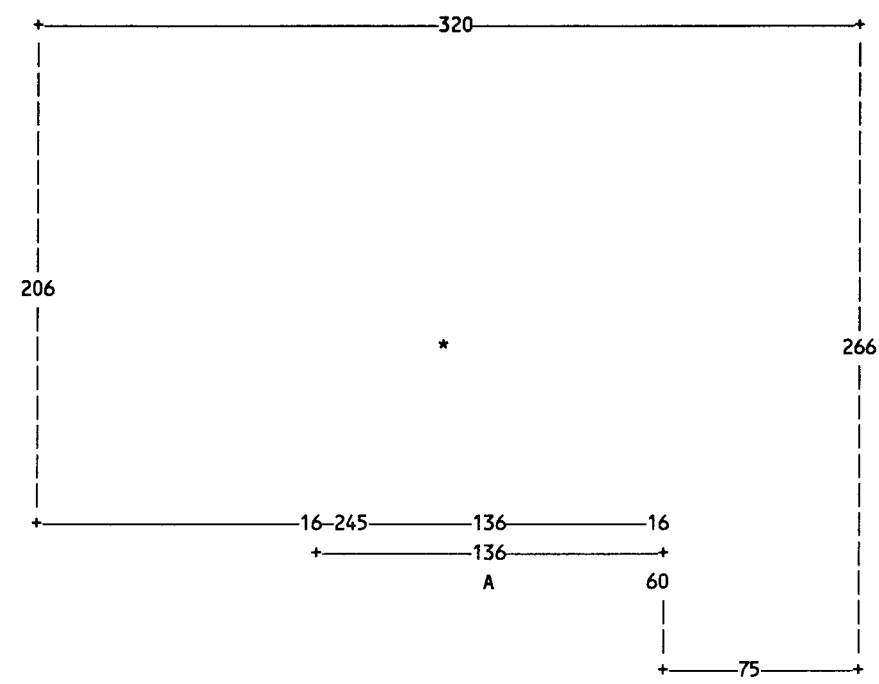
304	0	0.0	0	0	0	0	0	0	0	OTHER FEATURES/ATTACHED IMPROVEMENTS				
SQFT	TYPE	SQUARE	FT	UNIT\$	INF	INF	%	LAND	VALUE	LINE	STRUC	FLAT	MEASUREMENTS	IDENT
										NO.	CODE	+/-	(ONE) ( TWO )	UNITS
341	0		0	0.00	0	0	0		0	711	1	SS1	74796	0 1 1
342	0		0	0.00	0	0	0		0	712	1	CW1	190	0 1 1
343	0		0	0.00	0	0	0		0	713	1	CW1	246	0 1 1
										714	0		0	0 0 0
ACRE	TYPE	ACRES	SOIL/TYPE	UNIT\$	INF	INF	%	LAND	VALUE	715	0		0	0 0 0
371	1	5.380		25,828	0	0	0		138,956	716	0		0	0 0 0
372	0	0.000		0	0	0	0		0	717	0		0	0 0 0
373	0	0.000		0	0	0	0		0	718	0		0	0 0 0
374	0	0.000		0	0	0	0		0					
375	0	0.000		0	0	0	0		0					
376	0	0.000		0	0	0	0		0					

SITE INFORMATION			YARD IMPROVEMENTS/SECONDARY BUILDINGS							
450 TOPOGRAPHY	1 LEVEL	0 BLANK	STRUC	FLAT			IDENT	PHYS	FUNC	YEAR
451 UTILITIES	2 PUBLIC WATER	3 PUBLIC SEWER	CODE	+/-	DIMENSIONS		UNITS	COND	UTIL	BLT
	0		801 PA1		1	35900	1	3	3	80
427 STREET/RD	1 PAVED	0 BLANK	802		0	0	0	0	0	0
	0 BLANK	0 BLANK	803		0	0	0	0	0	0
431 SETBACK	2 NHBD AVERAGE		804		0	0	0	0	0	0
432 FRNT TRAFFIC	1 LIGHT		805		0	0	0	0	0	0
419 TOTAL ACRES	5.380		806		0	0	0	0	0	0

HRS Reference #109



010 PARCEL ID 45-01-78-00



VECTORS	VECT	E/I	DESCRIPTION	AREA
180 A0CU60L245U206R320D266L75	*	0	1SMTL/S	70420
181 A1U60CD16X136H	A	1	1SBR+FR/S	2176
182	B	0		0
183	C	0		0
184	D	0		0
185	E	0		0
186	F	0		0
187	G	0		0

PARCEL ID: 45-01-78-00

CLASS: 08

ROUTING NO:

CARD 1 OF 1

ACCOUNT NO:

PROPERTY ADDRESS: 119 BOWEN RD

NBHD : 8

SALE DATE: 0

SALE TYPE: 0

SALE PRICE: 0

SALE VALIDITY:

LAND DATA AND COMPUTATIONS

LAND TYPE	ACT FRONT SQFT/ACRE	EFFECTIVE DEPTH	DEPTH FACTOR	EFFECTIVE FRONT	UNIT PRICE	INFLUENCE(INF)FACTOR			LAND VALUE
						INF FACTOR 1	INF FACTOR 2	INF%	
PRIMARY SITE	5.380				25,828	BLANK	BLANK	0%	138,956
GROSS TYPE: 0 BLANK									0
								LAND VALUE:	139,000

BUILDING OTHER FEATURES

LINE	STRUCTURE CODE	FLAT	MEAS-1	MEAS-2	ID	UNITS	UNITS	RATE/COST	RCN
1	SS1-SPRINK WET		74796	0	1		SQFT	1.82	136,130
1	CW1-CRANEWAYS		190	0	1		LNFT	45.54	8,650
1	CW1-CRANEWAYS		246	0	1		LNFT	45.54	11,200

INTERIOR-EXTERIOR DATA

BLDG NO: 1

YEAR BUILT: 1980

NO. OF UNITS: 0

STRUCTURE TYPE : 401-MANUFAC PROCESSING

GRADE: C

IDENT UNITS: 1

BASIC TYPE CODE: 4

SEC	LEVELS				DIMENSIONS		USE TYPE	PERM HT		WALLS		CONS	IN%	PTNS	H/A	PLMB	SF	RATE	RCN	PHYS FUNC %GD			RCNLD
1	01	01	1	72596	044-LGHT MANUFACT		1172	20	METAL-LIGH		2	100	NORM	3/0	NORM	30.09	2,340,390	NORM	NORM	78	1,825,500		
1	M1	M1	1	2200	085-ENCLOSURE		248	8	ENCLOSURE		0	100	NORM	1/0	NORM	28.57	62,850	NORM	NORM	78	49,020		
																			UNADJ. TOTAL RCN			2,403,240	
																			AVG. %GOOD			0.78	
MEMO																			UNADJ. TOTAL RCNLD			1,874,520	
U.S. TSUBAKI																			GRADE FACTOR			X	1.00
																			TOT. BLDG. RCNLD			1,874,520	
0																			IDENTICAL UNITS			X	1
0																			ECON. COND FACTOR			X	1.00
																			TOTAL RCNLD			1,874,520	

MEMO  
U.S. TSUBAKI

0  
0

YARD IMPROVEMENTS AND/OR SECONDARY BUILDINGS

STRUCTURE CODE	FLAT	SIZE1	SIZE2	ID	UNITS	UNITS	RATE/COST	RCN	YEAR	PHYS COND	FUN CD	%GD	RCNLD	
PA1-ASPH PARKIN		1	35900	1		SQFT	1.24	44,426	1980	NORMAL	NORMAL	50	22,210	
OTHER IMPROVEMENT:													0	
TOTAL OBY VALUE													22,210	
LAND													VALUE	139,000
BLDG													VALUE	1,896,700
TOTAL													VALUE	2,035,700

1993 PRIOR VALUE

1994 COST VALUE

LAND VALUE

0

139,000

BLDG VALUE

0

1,896,700

TOTAL VALUE

1,308,000

2,035,700

TOTAL COST / SQFT = 27.22

(RENT YEAR 1994)
 BENNINGTON, VERMONT
 L ID NO: 45-01-78-00
 CLASS: 08
 ROUTING NO:
 UNIT NO:
 NBHD: 8
 PROPERTY ADDRESS: 119 BOWEN RD
 E DATE: 0
 SALE PRICE:
 0
 SALE SOURCE: 0
 SALE VALIDITY:

STRUCTURE CODE = 401
 ASSIGNED TO MODEL TYPE = 12

MODEL ADJUSTMENTS:
 INCOME PSF \$ 4.50 x 0.90 = 4.05
 EXPENSE PSF \$ 0.60 x 0.00 = 0.60
 CAP OVERRIDE = 0.000

INCOME PORTION:
 EXPENSES PORTION:

xx 12-MANUFACTURING
 MODEL GROUP NUMBER 1
 GROSS LEASABLE 72,596 X 4.05 X 1.00 = 294,014
 COVERED PARKING 0 X 0 = 0
 PARKING 0 X 0 = 0
 POTENTIAL GROSS INCOME = 294,014
 PERCENT OCCUPANCY X 90%
 EFFECTIVE GROSS INCOME = 264,612
 EXPENSES: PSF TOTAL = 43,558
 EXPENSES: MGMNT OR OPER 0% OF EFF. GROSS = 0
 TOTAL EXPENSES = ( 43,558)
 AGE FACTOR ( 14 YEARS = 1.00 )
 EXPENSES 0.60 x 1.00 = 0.60 + 0.00(U) = 0.60
 72,596 SF x 0.60 = 43,558
 AGE FACTOR 1.00 x EXPENSES 0 = 0
 NET INCOME = 221,055
 TOTAL NET INCOME = 221,055

INCOME CAPITALIZATION

EQUITY RATIO 1.00 x CASH ON CASH 0.1000 = 0.1000

DISTRICT 0 EFFECTIVE TAX RATE = 0.0200

DIVIDED BY TOTAL CAPITALIZATION RATE = 0.1200

NET INCOME 221,055 @ 0.1200

VALUE, INCOME APPROACH 1,842,125

RESIDUAL LAND 0

ADJUSTED VALUE, INCOME APPROACH 1,842,125

AVG 25.38 PER BLDG SQFT ( 72,596 EXCLD PARKING) GROSS RENT MULTIPLIER = 7.0

VALUE SUMMARY - PARCEL					
	COST VALUE	INCOME VALUE	PARCEL VALUE	PRIOR VALUE	[1.00] ASSESSED VALUE
LAND VALUE	139,000	139,000	139,000	0	1,842,100
BLDG VALUE	1,896,700	1,703,100	1,703,100	0	1,703,100
TOTAL VALUE	2,035,700	1,842,100	1,842,100	1,308,000	139,000
VALUE FLAG	1 = INCOME				



COST ESTIMATE FOR: UST, Inc.  
PROPERTY OWNER: Same  
ADDRESS: Bowen Road, Bennington  
SURVEYED BY: David G. Buckley  
DATE OF SURVEY: June 1, 1985  
DESCRIPTION:

OCCUPANCY: INDUSTRIAL MANUFACTURING FLOOR AREA: 73,840 Square Feet CLASS: S Steel COST RANK: 2.0 Average NUMBER OF STORIES: 1.0 EXTERIOR WALL:	AVERAGE STORY HEIGHT: 20.0 Feet EFFECTIVE AGE: 3 Years CONDITION: 4.0 Good COST AS OF: 05/85
---	---

EXTERIOR WALL:  
Corrugated Steel, Steel Frame.. 100%

HEATING AND COOLING:

Forced Air.....	100%
Warm and Cooled Air.....	5%

OTHER FEATURES:

OTHER FEATURES.	73,840 Square Feet		
Sprinklers Serving	UNITS	COST	TOTAL

BASIC STRUCTURE COST:	73,840	20.78	1,534,249
-----------------------	--------	-------	-----------

Cost Data by MARSHALL and SWIFT

DEPRECIATION: \$ 153,425

Physical.....5%

Functional .....0

Economic .....5%

Depreciated value of improvements	\$1,380,824
	80,700

Depreciated value of land	80,700
Land value @\$15,000/acre	1,461,524

TOTAL VALUE 1,481,324

INDICATED MARKET VALUE (Rounded off).....\$1,460,000







# IMPROVEMENT DESCRIPTION

Name	UST, Inc
Type and Design	Steel with insulated metal walls
General Quality	Average
Age	c. 1980
Foundation	Poured cement
Frame	Steel Girders
Floor Structure	6" Cement Slab
Floor Cover	None
Ceilings	Metal
Floor Height	14 to 26 feet - Average 20 feet
No. Floors above Grade	1
Interior Construction	Unfinished
Wall Covering	Insulation with fiberboard wainscoting
Plumbing	Standard with locker room
Sprinkler System	Wet
Heating/Ventilation	Electric off peak floor & suspended propane HA
Cooling	FHA heat & cooling
Electrical	1000 KV - 460-3 phase 4 wire - Bus Duct system
Lighting	Standard suspended fluorescent
Exterior Walls	22 gauge metal
Windows	Just in office area
Doors	(2) 14 by 14' overhead doors
Elevators	None
Roof Structure	Metal
Roof Cover	metal
Loading Docks	One
Drive-In Doors	Two
Miscellaneous Features	2 story 20 by 50 CB interior
Spur Trackage	None
General Condition	Good
Gross Building Area	72,840 sf.

## Space Breakdown:

Basement	None
Ground Floor	72,840
Mezzanine	1,000
Parking	Asphalt & gravel
Manufacturing/Production	51,350 sf.
Warehouse	16,650 sf.
Office and Retail	4,640
Air Conditioned	In Office area only - heat pump

## Site:

Land Size	5.38 Acres
Access/Surface	Macadem
Parking/Surface	Macadem & Gravel - Limited
Frontage	876'
Landscaping	Little or none
Topo/Soil	Flat - gravel with considerable subsurface water
Sewer/Water	Town

ADDITIONAL COMMENTS: Electric heated floor has proved inadequate requiring a suspended gas fired hot air system. Office finish is average with hardcover flooring, press board and panel walls and dropped suspended acoustic ceilings.

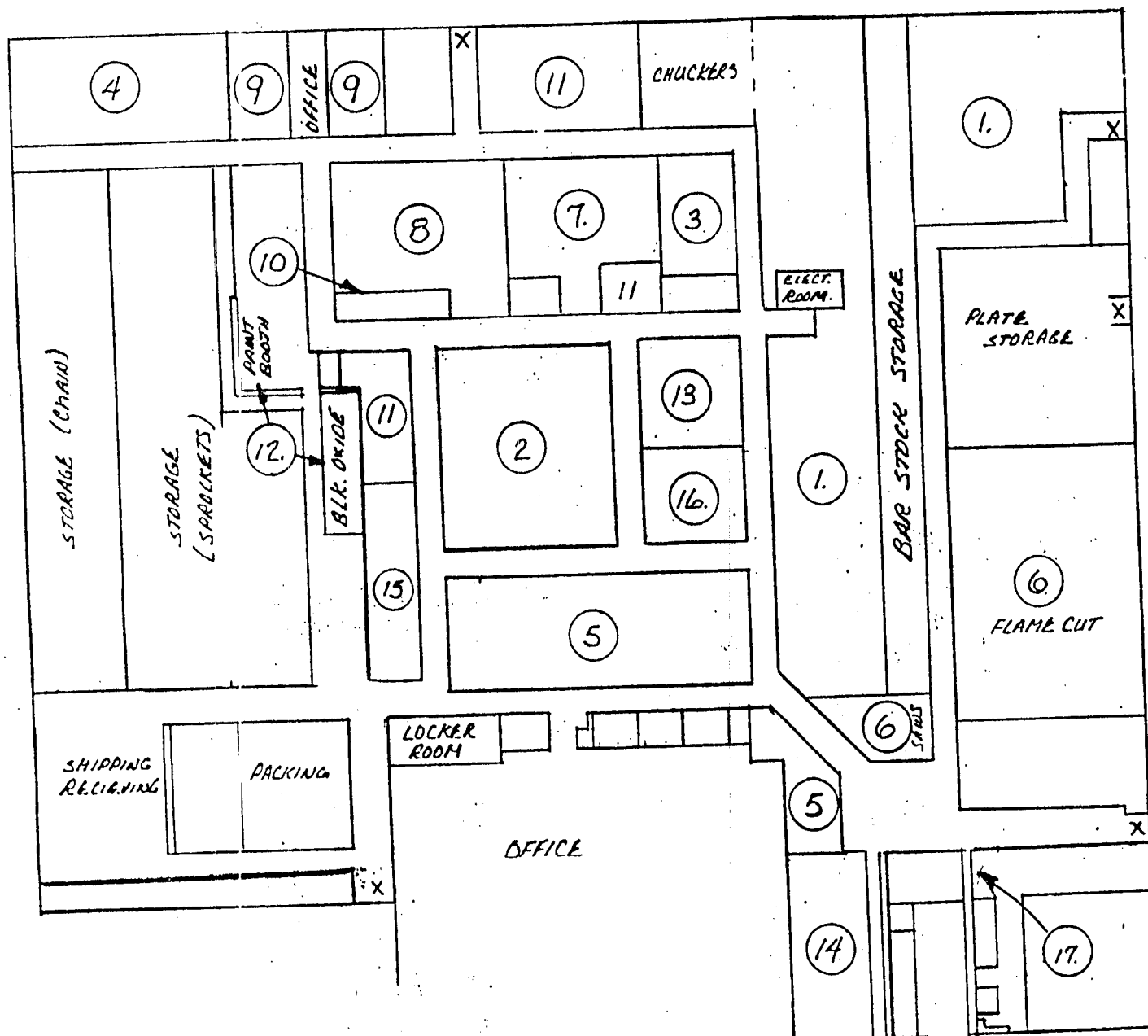




U.S. TSUBAKI, INC.  
PRODUCTION FACILITY  
FLOOR PLAN  
BENNINGTON, VERMONT

HRS Reference #109

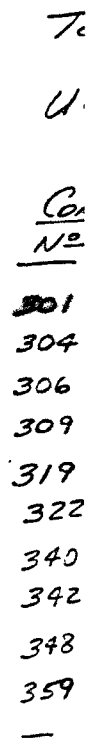
LISTING

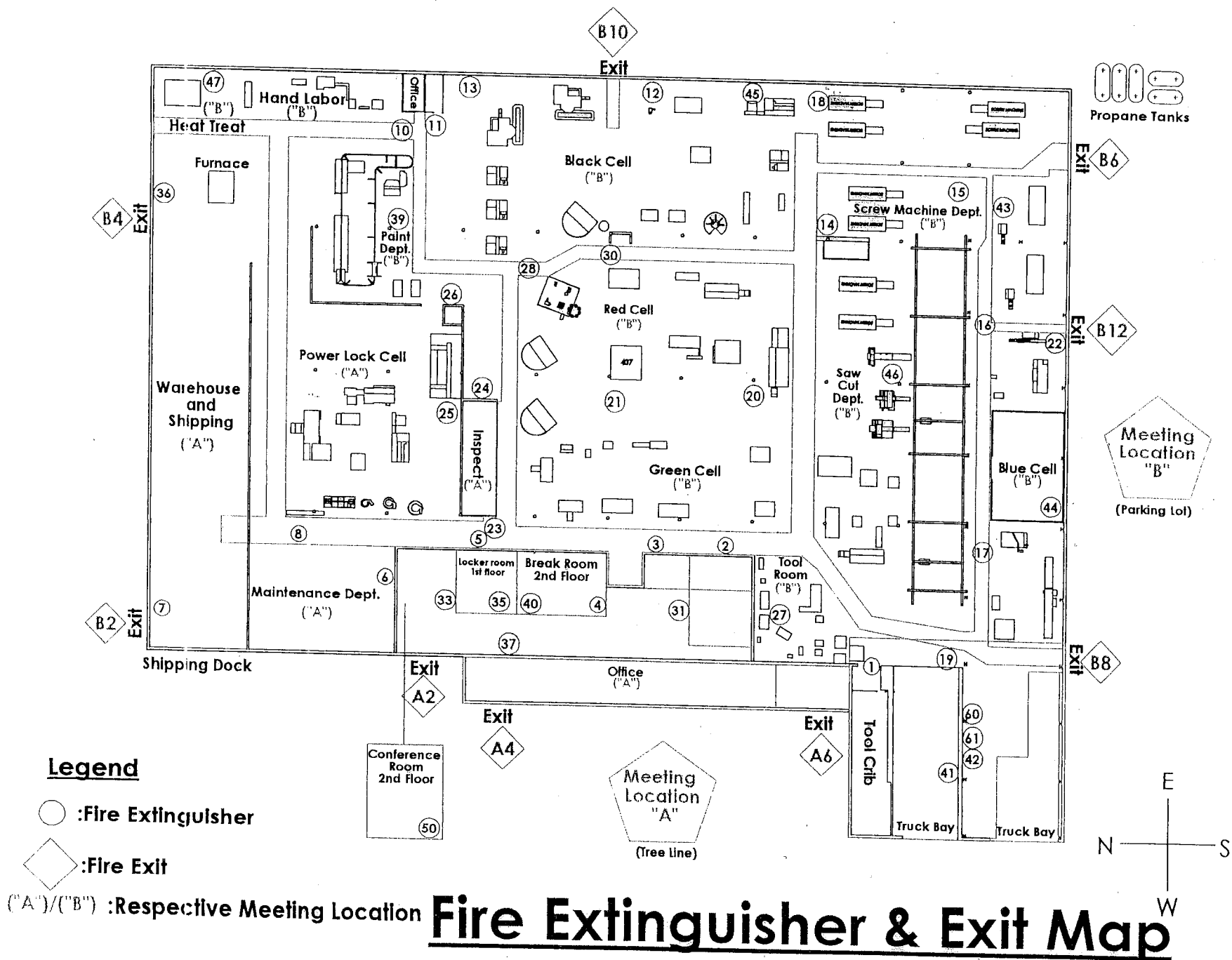


- 1.) Screw Machine Dept.
- 2.) Hobbing Machine Dept.
- 3.) Plate Bore Work Cell
- 4.) Alteration Dept.
- 5.) Lathe Dept.
- 6.) Raw Material Cutting Area
- 7.) Deburring Dept.
- 8.) Drill and Tap Dept.
- 9.) Hand Labor Dept.
- 10.) Keyway Broach Dept.
- 11.) Welding & Heat Treatment
- 12.) Finishing Department
- 13.) Tool Room
- 14.) Machine Maintenance Dept.
- 15.) Quality Assurance Dept.
- 16.) Tool Crib
- 17.) Hazardous Waste Storage Area

TOTAL PRODUCTION FACILITY  
SQUARE FOOTAGE  
53847<sup>2</sup>

18. DON FACTOR'S DESK  
19, & 20. SHIPPING & REC. (2)

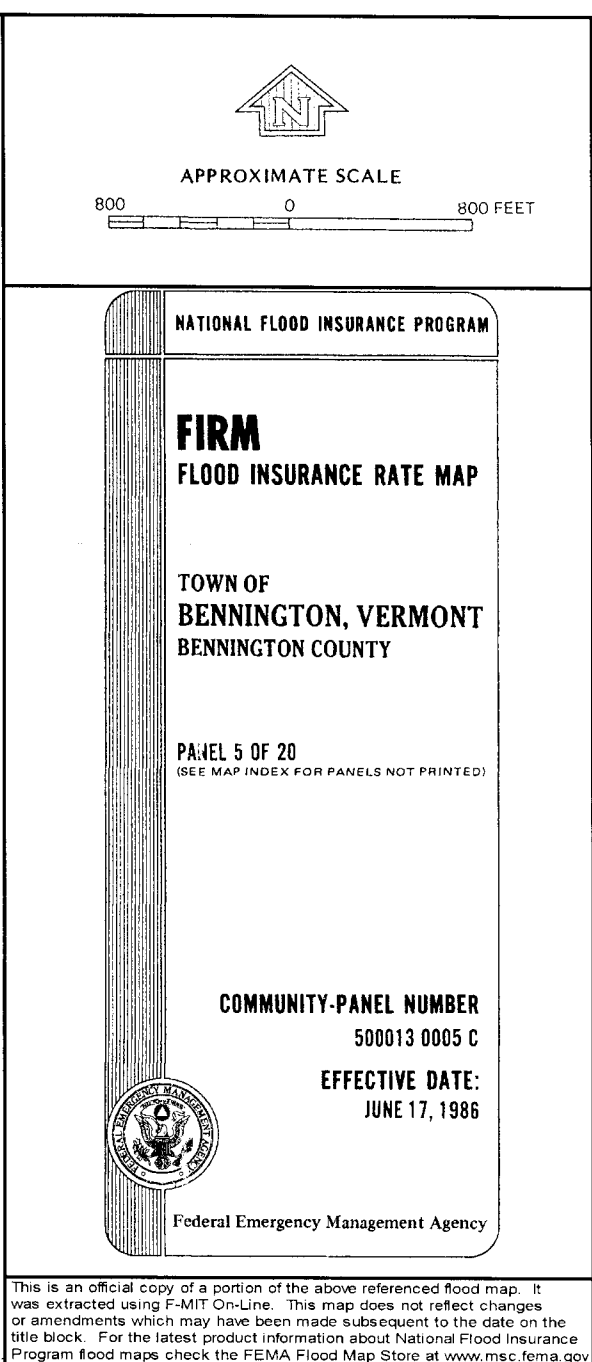




US Tsubaki, 222 Bonen Road







U.S. Tsubaki  
222 Bowen Road  
Bennington, Vermont



Photo 1: U.S. Tsubaki, Inc., 222 Bowen Road, Bennington VT



Photo 2: Front of facility, facing north



Photo 3: Facility interior, near eyewash station and related floor drain.



Photo 4: Facility interior, northwest wall near loading dock



U.S. Tsubaki  
222 Bowen Road  
Bennington, Vermont



Photo 5: Transformer (T-2) and stormdrain.



Photo 6: Transformer T-2.



Photo 7: Transformer (T-1).

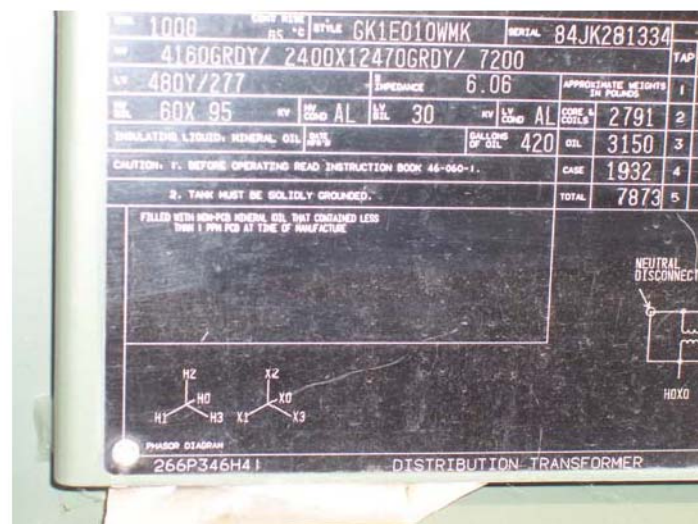
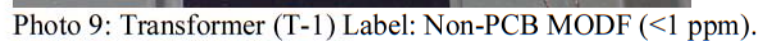


Photo 8: Transformer (T-2) Label: Non-PCB MODF (<1ppm)





U.S. Tsubaki  
222 Bowen Road  
Bennington, Vermont



Photo 13: Office entrance, front of facility.



Photo 14: Unnamed stream, west side of facility.



Photo 15: Unnamed stream, front of facility.



Photo 16: Trench drain outfall.



U.S. Tsubaki  
222 Bowen Road  
Bennington, Vermont



Photo 17: Trench drain near truck bays, front of facility.



Photo 18: Trench drain with green tracing dye.



Photo 19: Open manhole in front of facility showing red tracing dye from interior floor drain dye testing.



Photo 20: Open manhole in front of facility, along Bowen Road.

Page 72 of 434



A photograph showing a paved asphalt surface in the foreground, likely a parking lot or road. Behind the pavement is a line of bare, brown shrubs and trees. A chain-link fence runs across the middle ground. In the background, a large, multi-story building is partially visible through the trees. The sky is overcast and grey.

**HAZARDOUS WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL  
IF FOUND, CONTACT THE NEAREST POLICE, OR  
PUBLIC SAFETY AUTHORITY, OR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY

U.S. TSP#	800-447-7343
ITS#	
REGISTRATION#	VT - 0381
VT#	MA54111561202-A
Waste Code#	
RC Waste Description	
RC Waste Description valid, toxic, inorganic, in a. LEAD 8, CONTAINS	
PCB (S)	
HAZARDOUS BLACK GREASE	
SGS	

11-11-03

**HANDLE WITH CARE!**  
CONTAINS HAZARDOUS OR TOXIC WASTES

**NO REGULATED WASTE**

THIS WASTE NOT  
REGULATED BY THE  
U.S. ENVIRONMENTAL  
PROTECTION AGENCY  
(RCF/EPCRA)

U.S. TSUBAKI  
119 BOWEN ROAD  
BENNINGTON VT 05201  
VTD082275959 MAM201925  
9843-02 NON-DOT, NON-RCRA  
VIBRATORY REGULATED MATERIAL  
SLUDGE MA99  
802-447-7561

**NON-REGULATED WASTE**

Photo 24: Vibratory sludge previously stored on property



U.S. Tsubaki  
222 Bowen Road  
Bennington, Vermont



Photo 25: Previous waste storage on property (Nov. 2003)



Photo 26: Trench drain outfall into unnamed stream.



Photo 27: West side of facility, facing east.



# ***FirstSearch Technology Corporation***

## **Environmental FirstSearch™ Report**

TARGET PROPERTY:

**222 BOWEN ROAD**

**BENNINGTON VT 05201**

Job Number: B 360

**PREPARED FOR:**

Tighe & Bond

53 Southampton Road

Westfield, MA 01085

02-06-06



*Tel: (781) 551-0470*

*Fax: (781) 551-0471*

---

Environmental FirstSearch is a registered trademark of FirstSearch Technology Corporation. All rights reserved.

# Environmental FirstSearch Search Summary Report

**Target Site:** 222 BOWEN ROAD  
BENNINGTON VT 05201

## FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	10-07-05	1.00	0	0	0	0	0	0	0
CERCLIS	Y	01-13-06	0.50	0	0	1	0	-	0	1
NFRAP	Y	08-01-05	0.25	0	0	0	-	-	0	0
RCRA TSD	Y	09-22-05	0.50	0	0	0	0	-	0	0
RCRA COR	Y	12-10-05	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	12-10-05	0.25	0	0	2	-	-	1	3
ERNS	Y	12-31-05	0.25	0	0	2	-	-	0	2
State Sites	Y	10-27-05	1.00	0	0	3	7	33	0	43
Spills-1990	Y	10-27-05	0.25	0	1	5	-	-	4	10
SWL	Y	04-12-05	0.50	0	0	0	0	-	0	0
REG UST/AST	Y	10-27-05	0.25	0	0	1	-	-	0	1
Leaking UST	Y	10-27-05	0.50	0	1	0	5	-	2	8
- TOTALS -				0	2	14	12	33	7	68

### Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

### Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch  
Site Information Report***

**Request Date:** 02-06-06  
**Requestor Name:** Jessica Roberts  
**Standard:** ASTM

**Search Type:** COORD  
**Job Number:** B 360  
**Filtered Report**

**TARGET ADDRESS:** 222 BOWEN ROAD  
BENNINGTON VT 05201

***Demographics***

<b>Sites:</b> 68	<b>Non-Geocoded:</b> 7	<b>Population:</b> NA
<b>Radon:</b> 0.2 - 8 PCI/L		

***Site Location***

	<u><b>Degrees (Decimal)</b></u>	<u><b>Degrees (Min/Sec)</b></u>		<u><b>UTMs</b></u>
<b>Longitude:</b>	-73.189372	-73:11:22	<b>Easting:</b>	647844.952
<b>Latitude:</b>	42.892243	42:53:32	<b>Northing:</b>	4750224.089
			<b>Zone:</b>	18

***Comment***

<b>Comment:</b> PHASE I UPDATE FEB 2006
---

***Additional Requests/Services***

**Adjacent ZIP Codes:** 0 Mile(s)

**Services:**

ZIP					Requested?		Date
Code	City Name	ST	Dist/Dir	Sd			
					Sanborns	No	
					Aerial Photographs	No	
					Historical Topos	No	
					City Directories	No	
					Title Search	No	
					Municipal Reports	No	
					Online Topos	No	



# *Environmental FirstSearch*

## *Sites Summary Report*

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**TOTAL:** 68      **GEOCODED:** 61      **NON GEOCODED:** 7      **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
46	LUST	VERMONT CONTAINER CORPORATION 4425455	BOWEN ROAD BENNINGTON VT 05201	0.09 NE	1
44	SPILLS	VT AOT GARAGE 04-WMD288	359 BOWEN ROAD BENNINGTON VT 05201	0.11 SW	2
45	SPILLS	04-WMD180	1057 N BRANCH ST BENNINGTON VT 05201	0.13 NW	3
1	CERCLIS	JARD COMPANY VTD048141741/NOT PROPOSED	BOWEN ROAD BENNINGTON VT 05201	0.15 SE	4
1	ERNS	US EAP, SUPERFUND, REGION 1 424790/FIXED FACILITY	JARD SUPERFUND SITE, 126 BO BENNINGTON VT	0.15 SE	5
1	ERNS	H30275/FIX FAC	60 WESTVIEW ST. BENNINGTON VT 05201	0.15 SE	6
1	SPILLS	JARD CORPORATION 97-WMD095	BENNINGTON VT 05201	0.15 SE	7
1	STATE	JARD COMPANY 770138/ACTIVE	BOWEN RD BENNINGTON VT 05201	0.15 SE	8
6	RCRAGN	U S TSUBAKI VTD082275959/SGN	119 BOWEN RD BENNINGTON VT 05201	0.16 NW	9
6	SPILLS	U.S. TSUBAKI INC. 98-WMD315	119 BOWEN ROAD BENNINGTON VT	0.16 NW	12
6	SPILLS	UST CORPORATION 91-189	BOWEN RD BENNINGTON VT 05201	0.16 NW	13
40	STATE	U S TSUBAKI 20043196/CLOSED	222 BOWEN RD BENNINGTON VT 05201	0.16 SE	14
7	RCRAGN	VT AOT VTD982762841/VGN	BOWEN RD BENNINGTON GARAGE BENNINGTON VT 05201	0.17 SE	15
7	SPILLS	AOT GARAGE 92-109	BOWEN RD BENNINGTON VT 05201	0.17 SE	16
7	STATE	AOT BENNINGTON 900644/ACTIVE	359 BOWEN ROAD BENNINGTON VT 05201	0.17 SE	17
7	UST	VAOT BENNINGTON GARAGE 243	BOWEN ROAD BENNINGTON VT 05201	0.17 SE	18
9	STATE	ROBERT GREENE INC 972314/ACTIVE	399 NORTH BRANCH ST BENNINGTON VT	0.27 SE	20
5	STATE	FORMER SCHMELTZER PROPERTY 770201/CLOSED	1 SHIELDS DRIVE BENNINGTON VT	0.33 NW	21
5	LUST	MORRISON SALES AND SERVICES INC 1557	KOCHER DRIVE BENNINGTON VT 05201	0.37 NW	22
5	LUST	MORRISON CHEV CADILLAC 1110671	MAIN STREET BENNINGTON VT 05201	0.37 NW	23
5	LUST	MORRISON CHEV CADILLAC 671	MAIN STREET BENNINGTON VT 05201	0.37 NW	25

# *Environmental FirstSearch*

## *Sites Summary Report*

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**TOTAL:** 68      **GEOCODED:** 61      **NON GEOCODED:** 7      **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
5	STATE	MORRISON SALES AND SERVICE 951748/ACTIVE	KOCHER DRIVE BENNINGTON VT 05201	0.37 NW	25
18	LUST	K-MART #9536 4426305	19 KOCHER DRIVE, BENNINGTON BENNINGTON VT 05201	0.38 NW	26
18	LUST	J.C. PENNEY CO., INC. 2225	KOCHER DRIVE BENNINGTON VT 05201	0.38 NW	27
18	STATE	BENNINGTON SQUARE MALL 941578/CLOSED	KOCHER DRIVE BENNINGTON VT 05201	0.38 NW	29
2	STATE	KOCHER DRIVE DUMP 770031/ACTIVE	KOCHER DRIVE BENNINGTON VT 05201	0.41 NW	30
33	STATE	MOUNT ANTHONY UNION HIGH SCHOOL 931555/CLOSED	MAIN ST BENNINGTON VT	0.41 SW	31
8	STATE	BENNINGTON STATE OFFICE 921194/CLOSED	RT 7 BENNINGTON VT 05201	0.49 SW	32
17	STATE	BENNINGTON POTTERY 982395/CLOSED	324 COUNTY ST BENNINGTON VT 05201	0.61 SW	33
29	STATE	JOHNSONS FUEL SERVICE INC 972152/ACTIVE	99 NORTHSIDE DRIVE BENNINGTON VT 05201	0.62 NW	34
11	STATE	272 BEN MONT AVE. 992660/ACTIVE	272 BEN MONT AVENUE BENNINGTON VT 05201	0.63 NW	35
4	STATE	MARSON PROPERTY 982498/ACTIVE	100 HUNT ST BENNINGTON VT 05201	0.65 SW	36
42	STATE	WASSICK TIRE 880213/CLOSED	BENNINGTON VT 05201	0.65 SW	37
27	STATE	HUNT STREET GULF 890417/CLOSED	BENNINGTON VT	0.65 SW	38
36	STATE	RT 7 CONTAMINATION 911095/ACTIVE	RT 7 BENNINGTON VT 05201	0.66 SW	39
24	STATE	EARLS SERVICE CENTER 962108/ACTIVE	251 NORTH ST BENNINGTON VT	0.67 SW	40
30	STATE	JONES RESIDENCE 982493/CLOSED	COUNTY STREET BENNINGTON VT	0.69 SE	41
15	STATE	BENMONT PAPER PLANT 921268/CLOSED	219 BENMONT AVE BENNINGTON VT	0.72 SW	42
20	STATE	HAYNES AND KANE INC 951775/ACTIVE	215 BENMONT AVE BENNINGTON VT 05201	0.73 SW	43
23	STATE	CUMBERLAND FARMS #4006 992612/CLOSED	107 NORTHSIDE DRIVE BENNINGTON VT 05201	0.75 NW	44
22	STATE	CATAMOUNT DYERS 770133/CLOSED	BENMONT AVENUE BENNINGTON VT 05201	0.77 SW	45

# *Environmental FirstSearch*

## *Sites Summary Report*

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**TOTAL:** 68      **GEOCODED:** 61      **NON GEOCODED:** 7      **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
28	STATE	IDEAL FUELS AND FENCE CO 951774/CLOSED	259 BENMONT AVE BENNINGTON VT 05201	0.78 SW	46
21	STATE	C V P S BENNINGTON 900510/CLOSED	BENNINGTON VT 05201	0.79 SW	47
25	STATE	EVEREADY BATTERY 20053379/ACTIVE	401 GAGE ST BENNINGTON VT 05201	0.79 SW	48
25	STATE	EVEREADY BATTERY 770098/CLOSED	401 GAGE STREET BENNINGTON VT 05201	0.79 SW	49
43	STATE	WILLOW ROAD GARAGE (TOWN OF BENNIN 962041/ACTIVE	WILLOW RD BENNINGTON VT 05201	0.82 NW	50
12	STATE	AGWAY ENERGY PRODUCTS 931355/ACTIVE	126 HICKS AVE BENNINGTON VT 05201	0.85 NW	51
14	STATE	AUTO CITY 921185/ACTIVE	114 NORTHSIDE DR BENNINGTON VT 05201	0.85 NW	52
31	STATE	MACE SECURITY 972301/CLOSED	160 BENMONT AVE BENNINGTON VT 05201	0.86 SW	53
37	STATE	SAUSVILLE RESIDENCE 20012896/ACTIVE	155 NORTHSIDE DRIVE BENNINGTON VT 05201	0.89 NW	54
35	STATE	NOWLES 880178/CLOSED	BENNINGTON VT 05201	0.91 SW	55
13	STATE	APOLLO INDUSTRIES/JOHNSON FUELS 992634/CLOSED	127 RIVER ST BENNINGTON VT 05201	0.94 SW	56
41	STATE	VT STATE LIQUOR STORE 921255/CLOSED	DEPOT ST BENNINGTON VT 05201	0.94 SW	57
10	STATE	120 BENMONT AVE 20012935/ACTIVE	120 BENMONT AVE BENNINGTON VT 05201	0.95 SW	58
32	STATE	MINCER MINIMART 870078/CLOSED	BENNINGTON VT 05201	0.96 SE	59
38	STATE	STEWARTS SHOP 972212/CLOSED	713 MAIN ST BENNINGTON VT 05201	0.97 SE	60
34	STATE	NEW ENGLAND TELEPHONE 931381/CLOSED	126 PLEASANT ST BENNINGTON VT 05201	0.98 SW	61
19	STATE	BENNINGTON TOWN GARAGE 962018/CLOSED	DEPOT ST BENNINGTON VT 05201	0.98 SW	62
20	STATE	C & R GETTY 931420/CLOSED	636 MAIN BENNINGTON VT 05201	0.99 SW	63
16	STATE	BENNINGTON GARAGE 900645/ACTIVE	ROUTE 9 BENNINGTON VT 05201	1.00 SW	64
39	STATE	TUTTLES TRUE VALUE 982341/ACTIVE	DEPOT ST BENNINGTON VT 05201	1.00 SW	65



***Environmental FirstSearch  
Sites Summary Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**TOTAL:** 68      **GEOCODED:** 61      **NON GEOCODED:** 7      **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	LUST	FORMER DANIEL FAGER S FACILITY 672	1092 NORTH BENNINGTON ROAD BENNINGTON VT 05201	NON GC	66
	LUST	FORMER A. BROWN PROPERTY 9999614	NORTH STREET, N. BENNINGTON BENNINGTON VT 05201	NON GC	67
	RCRAGN	BENNINGTON AUTO TECH INC VTR000509539/VGN	1089 N BRANCH ST BENNINGTON VT 05201	NON GC	68
	SPILLS	AGWAY 95-WMD033	PARK ST BENNINGTON VT 05201	NON GC	69
	SPILLS	BENNINGTON AOT 02-WMD221	BOWEN RD BENNINGTON VT	NON GC	70
	SPILLS	STATE HIGHWAY GARAGE 04-WMD112	359 BOWEN RD BENNINGTON VT	NON GC	71
	SPILLS	93-052	NORTH BRANCH ST BENNINGTON VT 05201	NON GC	72

**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 61                      **DIST/DIR:** 0.09 NE                      **MAP ID:** 46

<b>NAME:</b> VERMONT CONTAINER CORPORATION	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> BOWEN ROAD	<b>ID1:</b> 4425455
BENNINGTON VT 05201	<b>ID2:</b>
	<b>STATUS:</b>
<b>CONTACT:</b>	<b>PHONE:</b>

**OWNER AND OPERATOR INFORMATION**

**OWNER NAME:** VERMONT CONTAINER CORPORATION **OWNER PERSON:**  
BOWEN ROAD  
BENNINGTON VT, 05201

**OPERATOR NAME:** VERMONT CONTAINER CORPORATION **OPERATOR PERSON:**

**LANDOWNER:**

**FACILITY TYPE:** INDUSTRIAL/COMMERCIAL

**PERMITTED TO:**

**SITE FINDINGS:**

CONTAMINATION FOUND BELOW STATE STANDARD, <20 PPM GAS OR 10 PPM DIESEL/HEATING OIL #2

**NUMBER OF TANKS PULLED:** 2

**NUMBER OF GROUNDWATER MONITORING WELLS:**

**NUMBER OF VAPOR MONITORING WELLS:**

**COMMENTS:** 1993

**TANK INFORMATION**

<b>TANK ID:</b> 1959-1	
<b>YEAR REMOVED:</b> 1993	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 10000	<b>SUBSTANCE STORED:</b> DIESEL
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

**TANK INFORMATION**

<b>TANK ID:</b> 1959-2	
<b>YEAR REMOVED:</b> 1993	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 1000	<b>SUBSTANCE STORED:</b> #2 OR #4 FUEL OIL
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 53

**DIST/DIR:** 0.11 SW

**MAP ID:** 44

**NAME:** VT AOT GARAGE  
**ADDRESS:** 359 BOWEN ROAD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 04-WMD288  
**ID2:**  
**STATUS:**  
**PHONE:** 828-2797

**CONTACT:** MIKE MORISSETTE

**DATE OF INCIDENT:** 8/24/2004 0:00:00  
**TIME OF INCIDENT:** 1500  
**DATE CLOSED:** 8/24/2004 0:00:00  
**REPORTED BY:** MIKE MORISSETTE  
**REPORTER S ORGANIZATION:** VT AOT  
**REPORTER S WORK PHONE:** 828-2797

**TYPE OF INCIDENT:** HYDRAULIC HOSE BURST  
**PRODUCT:** HYDRAULIC OIL  
**QUANTITY:** 10  
**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** VT AOT  
**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:**

**ACTIONS TAKEN:**

**COMMENTS:** SPILL TO ASPHALT SURFACE. AOT APPLIED SAND TO ABSORB SPILL AND WILL  
CONDUCT CLEANUP.

**DATE CLOSED:** 8/24/2004 0:00:00



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 54                      **DIST/DIR:** 0.13 NW                      **MAP ID:** 45

<b>NAME:</b>	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> 1057 N BRANCH ST	<b>ID1:</b> 04-WMD180
BENNINGTON VT	<b>ID2:</b>
BENNINGTON	<b>STATUS:</b>
<b>CONTACT:</b> KEVIN GOODHUE	<b>PHONE:</b> 802-447-9715

**DATE OF INCIDENT:** 5/20/2004 0:00:00  
**TIME OF INCIDENT:** 200  
**DATE CLOSED:** 5/20/2004 0:00:00  
**REPORTED BY:** KEVIN GOODHUE  
**REPORTER S ORGANIZATION:**  
**REPORTER S WORK PHONE:** 802-447-9715

**TYPE OF INCIDENT:** VEHICLE ACCIDENT  
**PRODUCT:** GASOLINE  
**QUANTITY:**  
**UNIT OF MEASURE:**

**RESPONSIBLE PARTY:**  
**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:** FURNACE BROOK

**CASE ASSIGNED TO:** SPILLS  
**ACTIONS TAKEN:** VEHICLE OVERTURNED IN FURNACE BROOK. NO RECOVERY OR CONTAINMENT OF  
GAS POSSIBLE DUE TO HIGH FLOW RATE. BENNINGTON FD RESPONSE.  
**COMMENTS:**  
**DATE CLOSED:** 5/20/2004 0:00:00

# Environmental FirstSearch Site Detail Report

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

## CERCLIS SITE

**SEARCH ID:** 1                      **DIST/DIR:** 0.15 SE                      **MAP ID:** 1

**NAME:** JARD COMPANY  
**ADDRESS:** BOWEN ROAD  
BENNINGTON VT 05201

**REV:** 1/13/06  
**ID1:** VTD048141741  
**ID2:** 0102282  
**STATUS:** NOT PROPOSED  
**PHONE:** 6179181282

**CONTACT:** DEAN TAGLIAFERRO

### DESCRIPTION:

ACTION/QUALITY	AGENCY/RPS	START/RAA	END
SITE REASSESSMENT Low	EPA Fund-Financed		08-02-2001
DISCOVERY	State, Fund Financed		04-29-1991
NON-NPL PRP SEARCH Search Complete, No Viable PRPs	Federal Enforcement Primary	08-01-1991	09-26-1996
PRELIMINARY ASSESSMENT High	State, Fund Financed		07-18-1991
REMOVAL Cleaned up	EPA Fund-Financed Primary	12-23-1991	12-29-1994
REMOVAL Cleaned up	EPA Fund-Financed Primary	09-21-1998	09-21-1999
REMOVAL ASSESSMENT	EPA Fund-Financed Primary	03-19-1991	03-19-1991
SECTION 104(E) REF LITIGATION	Federal Enforcement	01-08-1992	01-14-1992
SITE INSPECTION High	EPA Fund-Financed		05-18-1993

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**EMERGENCY RESPONSE NOTIFICATION SITE**

**SEARCH ID:** 4                                      **DIST/DIR:** 0.15 SE                                      **MAP ID:** 1

<b>NAME:</b> US EAP, SUPERFUND, REGION 1	<b>REV:</b>
<b>ADDRESS:</b> JARD SUPERFUND SITE, 126 BOWEN ROAD	<b>ID1:</b> 424790
BENNINGTON VT	<b>ID2:</b>
BENNINGTON	<b>STATUS:</b> FIXED FACILITY
<b>CONTACT:</b>	<b>PHONE:</b>

**SPILL INFORMATION**

**DATE OF SPILL:**                                      **TIME OF SPILL:** 1300

**PRODUCT RELEASED (1):** HAZARDOUS MATERIALS  
**QUANTITY (1):** 1  
**UNITS (1):** UNK

**PRODUCT RELEASED (2):**  
**QUANTITY (2):**  
**UNITS (2):**

**PRODUCT RELEASED (3):**  
**QUANTITY (3):**  
**UNITS (3):**

**MEDIUM/MEDIA AFFECTED**

<b>AIR:</b> NO	<b>GROUNDWATER:</b> YES
<b>LAND:</b> YES	<b>FIXED FACILITY:</b> NO
<b>WATER:</b> YES	<b>OTHER:</b> NO
<b>WATERBODY AFFECTED BY RELEASE:</b>	

**CAUSE OF RELEASE**

<b>DUMPING:</b> NO	<b>EQUIPMENT FAILURE:</b> YES
<b>NATURAL PHENOMENON:</b> NO	<b>OPERATOR ERROR:</b> NO
<b>OTHER CAUSE:</b> NO	<b>TRANSP. ACCIDENT:</b> NO
<b>UNKNOWN:</b> NO	

**ACTIONS TAKEN:** NONE

**RELEASE DETECTION:** SUPERFUND SITE/DRUMS STORM WINDS BLEW IN OVERHEAD DOOR TO WHERE DRUMS ARE STAGED

**MISC. NOTES:** RICE TO NOTIFY SITE OSC-CALLED T.C.HOME. NO ANSWER. CALLED R HAWORTH, EPA. HE SAYS ITS DEAN T.S. SITE-RICE CALLED DEAN-SITE ALL CLEANED UP. RICE NITIFIED OFFICER HOWE. RE:DEAN TAGLIAFERRO. THE JARD SITE HAS BEEN CLEANED UP. THE SIT

**DISCHARGER INFORMATION**

<b>DISCHARGER ID:</b> 424790	<b>DUN &amp; BRADSTREET #:</b>
<b>TYPE OF DISCHARGER:</b> FEDERAL GOVERNMENT	
<b>NAME OF DISCHARGER:</b> US EAP, SUPERFUND, REGION 1	
<b>ADDRESS:</b> 60 WESTVIEW ST.	
LEXINGTON MA 02173-	



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**EMERGENCY RESPONSE NOTIFICATION SITE**

**SEARCH ID:** 5                      **DIST/DIR:** 0.15 SE                      **MAP ID:** 1

<b>NAME:</b>	<b>REV:</b> 12-13-93
<b>ADDRESS:</b> 60 WESTVIEW ST.	<b>ID1:</b> H30275
BENNINGTON VT 05201	<b>ID2:</b>
	<b>STATUS:</b> FIX FAC
<b>CONTACT:</b>	<b>PHONE:</b> 617-860-4300

**CERCLIS (Y/N):**

**MAT:** HAZARDOUS MATERIALS              **QUANT:** 1.00              UNKNOWN

**LOCATION:** JARD SUPERFUND SITE, 126 BOWEN ROAD  
**CITY:** LEXINGTON MA 02173              **REPORTED:** 19921212

**SOURCE:** FIX FAC              **MEDIUM:** WITHIN FACILITY  
SUPERFUND SITE/DRUMS

**CAUSE:** OTHER  
STORM WINDS BLEW IN OVERHEAD DOOR TO WHERE DRUMS ARE STAGED

**ACT:** NONE  
**BY:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 50

**DIST/DIR:** 0.15 SE

**MAP ID:** 1

**NAME:** JARD CORPORATION  
**ADDRESS:** BENNINGTON VT  
**CONTACT:** RANDY BRONSON

**REV:** 10/27/05  
**ID1:** 97-WMD095  
**ID2:**  
**STATUS:**  
**PHONE:**

**DATE OF INCIDENT:**

**TIME OF INCIDENT:**

**DATE CLOSED:** 3/17/1997 0:00:00  
**REPORTED BY:** RANDY BRONSON

**REPORTER S ORGANIZATION:**  
**REPORTER S WORK PHONE:**

**TYPE OF INCIDENT:** FIRE  
**PRODUCT:** UNKNOWN CHEMICALS  
**QUANTITY:**  
**UNIT OF MEASURE:**

**RESPONSIBLE PARTY:** JARD CORP  
**ADDRESS:** BENNINGTON VT  
**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:** SITES- ES CORNEILLE  
**ACTIONS TAKEN:** SITE NUMBER 770138  
**COMMENTS:**  
**DATE CLOSED:** 3/17/1997 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 29

**DIST/DIR:** 0.15 SE

**MAP ID:** 1

**NAME:** JARD COMPANY  
**ADDRESS:** BOWEN RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 770138  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** EPA REMOVAL ACTION COMPLETED, SI COMPLETED  
**DATE OF SITE DISCOVERY:** 4/1/1991 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** PCB, FLOOR DRAIN/DRY WELL,

**OWNER INFORMATION:**

**OWNER:** LAURENCE H. LEVY, INC. TRUSTEE  
**OWNER ADDRESS:** 530 E. MAIN ST SUITE 725  
RICHMOND VA 23219



**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**RCRA GENERATOR SITE**

**SEARCH ID:** 2                      **DIST/DIR:** 0.16 NW                      **MAP ID:** 6

**NAME:** U S TSUBAKI  
**ADDRESS:** 119 BOWEN RD  
BENNINGTON VT 05201

**REV:** 7/12/04  
**ID1:** VTD082275959  
**ID2:**  
**STATUS:** SGN  
**PHONE:** 8024477561

**CONTACT:** TIMOTHY BERRY

**SITE INFORMATION**

**CONTACT INFORMATION:** TIMOTHY BERRY  
119 BOWEN RD  
BENNINGTON VT 05201

**PHONE:** 8024477561

**UNIVERSE INFORMATION:**

<b>SNC:</b>	N - NO
<b>BOYSNC:</b>	N - NO
<b>GPRA PERMIT:</b>	N - NO
<b>GPRA POSTCLOSURE:</b>	N - NO
<b>GPRA CA:</b>	N - NO
<b>GPRA CME:</b>	N - NO
<b>PERM PROG:</b>	N - NO
<b>PREM WRKLD:</b>	N - NO
<b>CLOSURE WRKLD:</b>	N - NO
<b>P C WRKLD:</b>	N - NO
<b>SUBJCA:</b>	N - NO
<b>SUBJCA TSD 3004:</b>	N - NO
<b>SUBJCA NON TSD:</b>	N - NO
<b>CA WRKLD:</b>	N - NO
<b>GEN STATUS:</b>	SQG - SMALL QUANTITY GENERATOR: GENERATES 100 - 1000 KG/MONTH OF
<b>HAZARDOUS WASTE</b>	

<b>IMPORTER ACTIVITY:</b>	U - UNKNOWN	<b>MIX WASTE GEN:</b>	U - UNKNOWN
<b>RECYCLER ACT:</b>	N - NO	<b>TRANS ACT:</b>	N - NO
<b>TSD ACT:</b>	N - NO	<b>U GRND INJ ACT:</b>	N - NO
<b>UNIV WASTE FAC:</b>		<b>TRANSFER FAC:</b>	U - UNKNOWN
<b>OS BURNER EXEMPT:</b>	U - UNKNOWN	<b>FURNACE EXEMP:</b>	U - UNKNOWN

**USED OIL INFORMATION**

<b>BURNER:</b>	N - NO	<b>PROCESSOR:</b>	N - NO
<b>REFINER:</b>	N - NO	<b>MARKET BURNER:</b>	N - NO
<b>SPEC MARKETER:</b>	N - NO	<b>TRANSFER FAC:</b>	N - NO
<b>TRANSPORTER:</b>	N - NO		

**NAIC INFORMATION**

<b>SECOND ID:</b>		<b>OFF SITE RECEIPT:</b>	U - UNKNOWN
<b>ACCESSIBILITY:</b>		<b>COUNTY OWNER:</b>	
<b>FED WSTE GEN OWNER:</b>	HQ	<b>FED WASTE GEN:</b>	2
<b>STATE WSTE GEN OWNER:</b>		<b>STATE WSTE GEN:</b>	- Continued on next page -

# Environmental FirstSearch

## Site Detail Report

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

### RCRA GENERATOR SITE

**SEARCH ID:** 2                      **DIST/DIR:** 0.16 NW                      **MAP ID:** 6

**NAME:** U S TSUBAKI  
**ADDRESS:** 119 BOWEN RD  
BENNINGTON VT 05201

**REV:** 7/12/04  
**ID1:** VTD082275959  
**ID2:**  
**STATUS:** SGN  
**PHONE:** 8024477561

**CONTACT:** TIMOTHY BERRY

#### ENFORCEMENT INFORMATION:

<b>AGENCY:</b>	S - STATE	<b>DATE:</b>	8/29/1989
<b>TYPE:</b>	120 - WRITTEN INFORMAL		
<b>AGENCY:</b>	S - STATE	<b>DATE:</b>	2/22/1994
<b>TYPE:</b>	120 - WRITTEN INFORMAL		
<b>AGENCY:</b>	S - STATE	<b>DATE:</b>	8/22/2002
<b>TYPE:</b>	120 - WRITTEN INFORMAL		
<b>AGENCY:</b>	S - STATE	<b>DATE:</b>	4/8/1991
<b>TYPE:</b>	120 - WRITTEN INFORMAL		

#### VIOLATION INFORMATION:

<b>VIOLATION NUMBER:</b>	0001	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	7/12/1989	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/2/1989
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0001	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	7/12/1989	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/2/1989
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0002	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	7/12/1989	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/23/1993
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0002	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	7/12/1989	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/23/1993
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0003	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	2/26/1991	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/23/1993
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0003	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	2/26/1991	<b>DETERMINED BY:</b>	S - STATE
<b>CITATION:</b>		<b>RESOLVED:</b>	11/23/1993
<b>TYPE:</b>	GER - GENERATOR ALL REQUIREMENTS		
<b>VIOLATION NUMBER:</b>	0004	<b>RESPONSIBLE:</b>	S - STATE
<b>DETERMINED:</b>	2/26/1991	<b>DETERMINED BY:</b>	S - STATE

-Continued on next page -





***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 51                      **DIST/DIR:** 0.16 NW                      **MAP ID:** 6

**NAME:** U.S. TSUBAKI INC.  
**ADDRESS:** 119 BOWEN ROAD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 98-WMD315  
**ID2:**  
**STATUS:**  
**PHONE:** 244.8721

**CONTACT:** RANDY BRONSON

**DATE OF INCIDENT:**  
**TIME OF INCIDENT:** 0  
**DATE CLOSED:** 8/21/1998 0:00:00  
**REPORTED BY:** RANDY BRONSON  
**REPORTER S ORGANIZATION:** EMERGENCY MANAGEMENTQ  
**REPORTER S WORK PHONE:** 244.8721

**TYPE OF INCIDENT:** FOAM IN FURNACE BROOK  
**PRODUCT:** UNKNOWN  
**QUANTITY:**  
**UNIT OF MEASURE:**

**RESPONSIBLE PARTY:** U.S. TSUBAKI  
**ADDRESS:** 119 BOWEN ROAD  
BENNINGTON

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:** WALLOOMSIC RIVER

**CASE ASSIGNED TO:** ENFORCEMENT  
**ACTIONS TAKEN:** LEAKING MACHINERY SHUT DOWN.  
**COMMENTS:** FOAM IN TRIBUTARY OF WALLOOMSIC RIVER. TRACED BACK VIA DYE TEST TO US  
TSUBAKI. LEAKING MACHINERY SHUT DOWN. PRODUCT IS DETERGENT.  
**DATE CLOSED:** 8/21/1998 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 52                      **DIST/DIR:** 0.16 NW                      **MAP ID:** 6

**NAME:** UST CORPORATION  
**ADDRESS:** BOWEN RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 91-189  
**ID2:**  
**STATUS:**  
**PHONE:** 244-8727

**CONTACT:** CHUCK MERRILL

**DATE OF INCIDENT:**

**TIME OF INCIDENT:**

**DATE CLOSED:** 7/1/1995 0:00:00

**REPORTED BY:** CHUCK MERRILL

**REPORTER S ORGANIZATION:** E. MGMNT

**REPORTER S WORK PHONE:** 244-8727

**TYPE OF INCIDENT:** CHEMICAL DUMPED IN STORM SEWER

**PRODUCT:** UNK

**QUANTITY:**

**UNIT OF MEASURE:**

**RESPONSIBLE PARTY:**

**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:**

**ACTIONS TAKEN:**

**COMMENTS:**

**DATE CLOSED:** 7/1/1995 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 45

**DIST/DIR:** 0.16 SE

**MAP ID:** 40

**NAME:** U S TSUBAKI  
**ADDRESS:** 222 BOWEN RD  
BENNINGTON VT  
BENNINGTON

**REV:** 12/27/01  
**ID1:** 20043196  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** PHASE II REPORT SHOWS MINOR CONTAMINATION. NO IMPACT TO GW ABOVE  
VGES. SMAC REOPENING SITE TO CONDUCT FURTHER ASSESSMENT.  
**DATE OF SITE DISCOVERY:** 3/5/2004 0:00:00  
**DATE OF SITE CLOSURE:** 12/1/2004 0:00:00  
**SOURCE:** UNKNOWN,

**OWNER INFORMATION:**

**OWNER:** U S TSUBAKI  
**OWNER ADDRESS:** 301 E MARQUARDT DRIVE  
CHICAGO IL 60090



**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**RCRA GENERATOR SITE**

**SEARCH ID:** 3                      **DIST/DIR:** 0.17 SE                      **MAP ID:** 7

**NAME:** VT AOT  
**ADDRESS:** BOWEN RD BENNINGTON GARAGE  
BENNINGTON VT 05201

**REV:** 12/10/05  
**ID1:** VTD982762841  
**ID2:**  
**STATUS:** VGN  
**PHONE:** 8024422051

**CONTACT:** JOSEPH-L TALBOT

**SITE INFORMATION**

**CONTACT INFORMATION:** JOSEPH-L TALBOT  
PO BOX 320 BOWEN RD  
BENNINGTON VT 05201

**PHONE:** 8024422051

**VIOLATION INFORMATION:**

**UNIVERSE INFORMATION:**

**SNC:** N - NO  
**BOYSNC:** N - NO  
**GPRA PERMIT:** N - NO  
**GPRA POSTCLOSURE:** N - NO  
**GPRA CA:** N - NO  
**GPRA CME:** N - NO  
**PERM PROG:** ----  
**PREM WR**

**HANDLER INFORMATION:**

<b>SECOND ID:</b>		<b>OFF SITE RECEIPT:</b>	U - UNKNOWN
<b>ACCESSIBILITY:</b>		<b>COUNTY OWNER:</b>	
<b>FED WSTE GEN OWNER:</b>	HQ	<b>FED WASTE GEN:</b>	3
<b>STATE WSTE GEN OWNER:</b>		<b>STATE WSTE GEN:</b>	

**NAIC INFORMATION**

**ENFORCEMENT INFORMATION:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 49

**DIST/DIR:** 0.17 SE

**MAP ID:** 7

**NAME:** AOT GARAGE  
**ADDRESS:** BOWEN RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 92-109  
**ID2:**  
**STATUS:**  
**PHONE:**

**CONTACT:** MIKE MORRISSETTE

**DATE OF INCIDENT:**

**TIME OF INCIDENT:**

**DATE CLOSED:** 6/1/1992 0:00:00

**REPORTED BY:** MIKE MORRISSETTE

**REPORTER S ORGANIZATION:** A O T

**REPORTER S WORK PHONE:**

**TYPE OF INCIDENT:** OIL SPILL-VANDALISM

**PRODUCT:** LINSEED OIL

**QUANTITY:** 55

**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** VERMONT A O T GARAGE

**ADDRESS:** BOWEN RD  
BENNINGTON VT

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:**

**ACTIONS TAKEN:** REPORT TAKEN

**COMMENTS:** SHANE ROCHELLE CALLED

**DATE CLOSED:** 6/1/1992 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 9

**DIST/DIR:** 0.17 SE

**MAP ID:** 7

**NAME:** AOT BENNINGTON  
**ADDRESS:** 359 BOWEN ROAD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 900644  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** LANDFARMING COMPLETED AT AIRPORT SITE. NEW PILE AT THE SITE FROM  
PIPING PROJECT (CIRCA 1999) READY TO SPREAD ONSITE. PILE IS 10 YARDS. WAITING FOR CONFIRMATION OF  
SPREADING. SMAC WILL FOLLOW (7/7/05, AD).  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** AGENCY OF TRANSPORTATION  
**OWNER ADDRESS:** 133 STATE ST  
MONTPELIER VT 05062



**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**REGISTERED UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 55                      **DIST/DIR:** 0.17 SE                      **MAP ID:** 7

<b>NAME:</b> VAOT BENNINGTON GARAGE <b>ADDRESS:</b> BOWEN ROAD BENNINGTON VT 05201	<b>REV:</b> 10/27/05 <b>ID1:</b> 243 <b>ID2:</b> 900644.00 <b>STATUS:</b> <b>PHONE:</b>
<b>CONTACT:</b> VAOT DISTRICT 1	

**TOTAL NUMBER OF TANKS:** 6

**FACILITY AND OWNER INFORMATION**

**TYPE OF FACILITY:** STATE

<b>OWNER NAME:</b> VERMONT AGENCY OF TRANSPORTATION MORRISETTE <b>OWNER ADDRESS:</b> 1 NATIONAL LIFE DRIVE DRAWER #33 MONTPELIER, VT 05633	<b>CONTACT:</b> MIKE
---	----------------------

<b>TANK ID:</b> -1-1-R <b>SUBSTANCE STORED:</b> FUEL OIL <b>TANK PROTECTION:</b> <b>TANK MONITORING:</b> / <b>SPILL/OVERFILL PROT.:</b> <b>PIPE PROTECTION:</b>	<b>TANK CAPACITY IN GAL.:</b> 3000 <b>YEAR REMOVED:</b> 1991  <b>PUMP TYPE:</b> <b>MONITORING:</b>
--	--

<b>TANK ID:</b> -1-2-R <b>SUBSTANCE STORED:</b> DIESEL <b>TANK PROTECTION:</b> <b>TANK MONITORING:</b> / <b>SPILL/OVERFILL PROT.:</b> <b>PIPE PROTECTION:</b>	<b>TANK CAPACITY IN GAL.:</b> 8000 <b>YEAR REMOVED:</b> 1991  <b>PUMP TYPE:</b> <b>MONITORING:</b>
--	--

<b>TANK ID:</b> 1960-3-R <b>SUBSTANCE STORED:</b> USED OIL <b>TANK PROTECTION:</b> <b>TANK MONITORING:</b> / <b>SPILL/OVERFILL PROT.:</b> <b>PIPE PROTECTION:</b>	<b>TANK CAPACITY IN GAL.:</b> 275 <b>YEAR REMOVED:</b> 1988  <b>PUMP TYPE:</b> <b>MONITORING:</b>
--	---

<b>TANK ID:</b> 1966-4-R <b>SUBSTANCE STORED:</b> GASOLINE <b>TANK PROTECTION:</b> <b>TANK MONITORING:</b> / <b>SPILL/OVERFILL PROT.:</b> <b>PIPE PROTECTION:</b>	<b>TANK CAPACITY IN GAL.:</b> 2000 <b>YEAR REMOVED:</b> 1988  <b>PUMP TYPE:</b> <b>MONITORING:</b>
--	--

<b>TANK ID:</b> 1966-5-R <b>SUBSTANCE STORED:</b> DIESEL <b>TANK PROTECTION:</b> <b>TANK MONITORING:</b> / <b>SPILL/OVERFILL PROT.:</b> <b>PIPE PROTECTION:</b>	<b>TANK CAPACITY IN GAL.:</b> 2000 <b>YEAR REMOVED:</b> 1988  <b>PUMP TYPE:</b> <b>MONITORING:</b>
--	--

- Continued on next page -

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**REGISTERED UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 55                      **DIST/DIR:** 0.17 SE                      **MAP ID:** 7

**NAME:** VAOT BENNINGTON GARAGE  
**ADDRESS:** BOWEN ROAD  
BENNINGTON VT 05201

**REV:** 10/27/05  
**ID1:** 243  
**ID2:** 900644.00  
**STATUS:**  
**PHONE:**

**CONTACT:** VAOT DISTRICT 1

<b>TANK ID:</b>	1991-1	<b>TANK CAPACITY IN GAL.:</b>	10000
<b>SUBSTANCE STORED:</b>	DIESEL	<b>YEAR REMOVED:</b>	
<b>TANK PROTECTION:</b>	PROTECTED STEEL	<b>PUMP TYPE:</b>	
<b>TANK MONITORING:</b>	INTERSTITIAL/	<b>MONITORING:</b>	
<b>SPILL/OVERFILL PROT.:</b>	SPILL AND OVERFILL		
<b>PIPE PROTECTION:</b>	FIBERGLASS REINFORCED PLASTIC		
<b>VERTICAL CHECK VALVE</b>			

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 40

**DIST/DIR:** 0.27 SE

**MAP ID:** 9

**NAME:** ROBERT GREENE INC  
**ADDRESS:** 399 NORTH BRANCH ST  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 972314  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** UST REMOVED. CONTAMINATION FOUND. INVESTIGATION COMPLETED, CLEANUP  
UNDERWAY. (9/9/99)  
**DATE OF SITE DISCOVERY:** 11/1/1997 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 25                      **DIST/DIR:** 0.33 NW                      **MAP ID:** 3

**NAME:** FORMER SCHMELTZER PROPERTY  
**ADDRESS:** 1 SHIELDS DRIVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 770201  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** DEC PA COMPLETED 12/90. NFRAP.  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**



**Environmental FirstSearch  
Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 60                      **DIST/DIR:** 0.37 NW                      **MAP ID:** 5

<b>NAME:</b> MORRISON SALES AND SERVICES INC	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> KOCHER DRIVE	<b>ID1:</b> 1557
BENNINGTON VT 05201	<b>ID2:</b> 951748.00
<b>CONTACT:</b> SAME AS OWNER	<b>STATUS:</b>
	<b>PHONE:</b>

**OWNER AND OPERATOR INFORMATION**

**OWNER NAME:** MORRISON SALES AND SERVICES INC    **OWNER PERSON:** EDWARD H SMITH PRESIDENT  
BOX 710 KOCHER DRIVE  
BENNINGTON VT, 05201

**OPERATOR NAME:** MORRISON SALES AND SERVICES INC    **OPERATOR PERSON:**

**LANDOWNER:**

**FACILITY TYPE:** INDUSTRIAL/COMMERCIAL  
**PERMITTED TO:** Tank Owner

**SITE FINDINGS:**  
CONTAMINATION FOUND ABOVE STATE STANDARD. REFERRED TO SITE MANAGEMENT

**NUMBER OF TANKS PULLED:** 1/1  
**NUMBER OF GROUNDWATER MONITORING WELLS:**  
**NUMBER OF VAPOR MONITORING WELLS:**  
**COMMENTS:** 94/97

**TANK INFORMATION**

<b>TANK ID:</b> 1984-2	<b>DATE OUT OF SERVICE:</b>
<b>YEAR REMOVED:</b> 1994	<b>SUBSTANCE STORED:</b> USED OIL
<b>TANK CAPACITY IN GALL.:</b> 2000	
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

**TANK INFORMATION**

<b>TANK ID:</b> 1984-1	<b>DATE OUT OF SERVICE:</b>
<b>YEAR REMOVED:</b> 1997	<b>SUBSTANCE STORED:</b> GASOLINE
<b>TANK CAPACITY IN GALL.:</b> 4000	
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 59                      **DIST/DIR:** 0.37 NW                      **MAP ID:** 5

<b>NAME:</b> MORRISON CHEV CADILLAC	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> MAIN STREET	<b>ID1:</b> 1110671
BENNINGTON VT 05201	<b>ID2:</b>
	<b>STATUS:</b>
<b>CONTACT:</b>	<b>PHONE:</b>

**OWNER AND OPERATOR INFORMATION**

<b>OWNER NAME:</b> JONOCO, INC. 100 MARILYN STREET BENNINGTON VT, 05201	<b>OWNER PERSON:</b>
---	----------------------

<b>OPERATOR NAME:</b> JONOCO, INC.	<b>OPERATOR PERSON:</b>
------------------------------------	-------------------------

**LANDOWNER:**

**FACILITY TYPE:** INDUSTRIAL/COMMERCIAL

**PERMITTED TO:**

**SITE FINDINGS:**

CONTAMINATION FOUND BELOW STATE STANDARD, <20 PPM GAS OR 10 PPM DIESEL/HEATING OIL #2

**NUMBER OF TANKS PULLED:** 4

**NUMBER OF GROUNDWATER MONITORING WELLS:**

**NUMBER OF VAPOR MONITORING WELLS:**

**COMMENTS:** 1986

**TANK INFORMATION**

<b>TANK ID:</b> 1972-4	
<b>YEAR REMOVED:</b> 1986	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 1000	<b>SUBSTANCE STORED:</b> UNKNOWN
<b>TANK PROTECTION:</b>	

**TANK INFORMATION**

<b>TANK ID:</b> 1972-3	
<b>YEAR REMOVED:</b> 1986	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 2000	<b>SUBSTANCE STORED:</b> GASOLINE
<b>TANK PROTECTION:</b>	

**TANK INFORMATION**

<b>TANK ID:</b> 1972-1	
<b>YEAR REMOVED:</b> 1986	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 2000	<b>SUBSTANCE STORED:</b> GASOLINE
<b>TANK PROTECTION:</b>	

**TANK INFORMATION**

<b>TANK ID:</b> 1972-2	
<b>YEAR REMOVED:</b> 1986	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 2000	<b>SUBSTANCE STORED:</b> GASOLINE

*Continued on next page -*

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 59

**DIST/DIR:** 0.37 NW

**MAP ID:** 5

**NAME:** MORRISON CHEV CADILLAC  
**ADDRESS:** MAIN STREET  
BENNINGTON VT 05201

**REV:** 10/27/05  
**ID1:** 1110671

**ID2:**  
**STATUS:**  
**PHONE:**

**CONTACT:**

**TANK PROTECTION:**

**Environmental FirstSearch**  
**Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 58                      **DIST/DIR:** 0.37 NW                      **MAP ID:** 5

**NAME:** MORRISON CHEV CADILLAC  
**ADDRESS:** MAIN STREET  
BENNINGTON VT 05201

**REV:**  
**ID1:** 671  
**ID2:**  
**STATUS:**  
**PHONE:**

**CONTACT:**

**REPORT DATE:**                      **FED REG:**  
**MATERIAL:**                      **NUMBER OF TANKS:** 4  
**LOW CAPACITY:**                      **HIGH CAPACITY:**  
**PRODUCT:**

**TANK REMOVED:** Y                      **UNCONTROLLED RELEASE:**                      **EMERGENCY:**  
**TANK RELEASE:**                      **PIPING RELEASE:**                      **OVERFILL RELEASE:**

**REMEDATION:**                      **COMPLETE:**

**REFERRED:**  
**COMMENT:** INDUSTRIAL/COMMERCIAL  
YEAR PULLED: 1986

**STATE SITE**

**SEARCH ID:** 36                      **DIST/DIR:** 0.37 NW                      **MAP ID:** 5

**NAME:** MORRISON SALES AND SERVICE  
**ADDRESS:** KOCHER DRIVE  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 951748  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** WASTE OIL UST RELEASE. DISSOLVED PETRO. AND CHLORINATED  
HYDROCARBON GW CONTAMINATION. PRODUCT RECOVERY WELL INSTALLED, WITH PASSIVE RECOVERY ONGOING.  
FREE PRODUCT REMOVAL EFFORTS 03. SOIL PILE TREATED AND THIN-SPREAD ONSITE.  
**DATE OF SITE DISCOVERY:** 1/1/1995 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE, WASTE OIL,

**OWNER INFORMATION:**

**OWNER:** MORRISON SALES AND SERVICE INC  
**OWNER ADDRESS:** KOCHER DRIVE  
BENNINGTON VT 05201



**Environmental FirstSearch  
Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 57                      **DIST/DIR:** 0.38 NW                      **MAP ID:** 18

<b>NAME:</b> K-MART #9536	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> 19 KOCHER DRIVE, BENNINGTON SQUARE BENNINGTON VT 05201	<b>ID1:</b> 4426305
	<b>ID2:</b>
	<b>STATUS:</b>
<b>CONTACT:</b>	<b>PHONE:</b>

**OWNER AND OPERATOR INFORMATION**

<b>OWNER NAME:</b> K-MART CORPORATION 3100 W. BIG BEAVER TROY MI, 48084	<b>OWNER PERSON:</b>
---	----------------------

<b>OPERATOR NAME:</b> K-MART CORPORATION	<b>OPERATOR PERSON:</b>
--	-------------------------

**LANDOWNER:**

**FACILITY TYPE:** INDUSTRIAL/COMMERCIAL  
**PERMITTED TO:** Tank Owner

**SITE FINDINGS:**  
CONTAMINATION FOUND BELOW STATE STANDARD, <20 PPM GAS OR 10 PPM DIESEL/HEATING OIL #2

**NUMBER OF TANKS PULLED:** 1  
**NUMBER OF GROUNDWATER MONITORING WELLS:**  
**NUMBER OF VAPOR MONITORING WELLS:**  
**COMMENTS:** 1989

**TANK INFORMATION**

<b>TANK ID:</b> 1979-1	
<b>YEAR REMOVED:</b> 1989	<b>DATE OUT OF SERVICE:</b>
<b>TANK CAPACITY IN GALL.:</b> 1000	<b>SUBSTANCE STORED:</b> USED OIL
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

**Environmental FirstSearch  
Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 56                      **DIST/DIR:** 0.38 NW                      **MAP ID:** 18

<b>NAME:</b> J.C. PENNEY CO., INC. <b>ADDRESS:</b> KOCHER DRIVE BENNINGTON VT 05201	<b>REV:</b> 10/27/05 <b>ID1:</b> 2225 <b>ID2:</b> 941578.00 <b>STATUS:</b> <b>PHONE:</b>
<b>CONTACT:</b>	

**OWNER AND OPERATOR INFORMATION**

<b>OWNER NAME:</b> S R YOUNG INC SHOPPING PLAZA SPRINGFIELD VT, 05156	<b>OWNER PERSON:</b> RICHARD C YOUNG PRESIDENT
---	--

<b>OPERATOR NAME:</b> S R YOUNG INC PO BOX 394 BRADFORD VT, 05033	<b>OPERATOR PERSON:</b>
---	-------------------------

**LANDOWNER:**

**FACILITY TYPE:** SERVICE STATION  
**PERMITTED TO:** Tank Owner

**SITE FINDINGS:**  
CONTAMINATION FOUND ABOVE STATE STANDARD. REFERRED TO SITE MANAGEMENT

**NUMBER OF TANKS PULLED:** 5  
**NUMBER OF GROUNDWATER MONITORING WELLS:**  
**NUMBER OF VAPOR MONITORING WELLS:**  
**COMMENTS:** 1996

**TANK INFORMATION**

<b>TANK ID:</b> 1970-3 <b>YEAR REMOVED:</b> 1996 <b>TANK CAPACITY IN GALL.:</b> 4000 <b>TANK PROTECTION:</b> UNPROTECTED STEEL	<b>DATE OUT OF SERVICE:</b> <b>SUBSTANCE STORED:</b> GASOLINE
---	--

**TANK INFORMATION**

<b>TANK ID:</b> 1970-4 <b>YEAR REMOVED:</b> 1996 <b>TANK CAPACITY IN GALL.:</b> 4000 <b>TANK PROTECTION:</b> UNPROTECTED STEEL	<b>DATE OUT OF SERVICE:</b> <b>SUBSTANCE STORED:</b> GASOLINE
---	--

**TANK INFORMATION**

<b>TANK ID:</b> 1970-2 <b>YEAR REMOVED:</b> 1996 <b>TANK CAPACITY IN GALL.:</b> 4000 <b>TANK PROTECTION:</b> UNPROTECTED STEEL	<b>DATE OUT OF SERVICE:</b> <b>SUBSTANCE STORED:</b> GASOLINE
---	--

**TANK INFORMATION**

<b>TANK ID:</b> 1970-1 <b>YEAR REMOVED:</b> 1996 <b>TANK CAPACITY IN GALL.:</b> 4000	<b>DATE OUT OF SERVICE:</b> <b>SUBSTANCE STORED:</b> GASOLINE
--	--

*Continued on next page -*

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 56                      **DIST/DIR:** 0.38 NW                      **MAP ID:** 18

**NAME:** J.C. PENNEY CO., INC.  
**ADDRESS:** KOCHER DRIVE  
BENNINGTON VT 05201

**REV:** 10/27/05  
**ID1:** 2225  
**ID2:** 941578.00  
**STATUS:**  
**PHONE:**

**CONTACT:**

**TANK PROTECTION:** UNPROTECTED STEEL

**TANK INFORMATION**

<b>TANK ID:</b>	1970-5	<b>DATE OUT OF SERVICE:</b>	
<b>YEAR REMOVED:</b>	1996	<b>SUBSTANCE STORED:</b>	GASOLINE
<b>TANK CAPACITY IN GALL.:</b>	4000		
<b>TANK PROTECTION:</b>	UNPROTECTED STEEL		

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 15

**DIST/DIR:** 0.38 NW

**MAP ID:** 18

**NAME:** BENNINGTON SQUARE MALL  
**ADDRESS:** KOCHER DRIVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 941578  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** INVEST COMPLETE  
**DATE OF SITE DISCOVERY:** 3/1/1994 0:00:00  
**DATE OF SITE CLOSURE:** 1/1/1996 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** JUSTICE DEVELOPEMENT CORP  
**OWNER ADDRESS:** P O BOX 365  
YONKERS NY 10704



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 32                      **DIST/DIR:** 0.41 NW                      **MAP ID:** 2

**NAME:** KOCHER DRIVE DUMP  
**ADDRESS:** KOCHER DRIVE  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 770031  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** DRAFT S I REPORT COMPLETED 3/93  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:** TOWN OF BENNINGTON  
**OWNER ADDRESS:** 205 SOUTH STREET  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 37                      **DIST/DIR:** 0.41 SW                      **MAP ID:** 33

**NAME:** MOUNT ANTHONY UNION HIGH SCHOOL  
**ADDRESS:** MAIN ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 931555  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** NO GW IMPACTS DETECTED ABOVE GWBS 26  
**DATE OF SITE DISCOVERY:** 1/1/1994 0:00:00  
**DATE OF SITE CLOSURE:** 5/1/1994 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** MOUNT ANTHONY UNION DISTRICT  
**OWNER ADDRESS:** PARK STREET EXT  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 16                      **DIST/DIR:** 0.49 SW                      **MAP ID:** 8

**NAME:** BENNINGTON STATE OFFICE  
**ADDRESS:** RT 7  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 921194  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE ASSESS COMPLETE, GW NOT IMPACTED ABOVE HEALTH ADVISORY LEVELS  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 2/1/1994 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** VT STATE BUILDINGS  
**OWNER ADDRESS:** 2 GOV AIKEN AVE  
MONTPELIER VT 05602

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 14

**DIST/DIR:** 0.61 SW

**MAP ID:** 17

**NAME:** BENNINGTON POTTERY  
**ADDRESS:** 324 COUNTY ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 982395  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** UST REMOVED. CONTAMINATION ROUND. 11/99 INVESTIGATION FOUND MINIMAL  
CONTAMINATION, ALL MONITOR WELLS BELOW VGES. SMAC  
**DATE OF SITE DISCOVERY:** 4/23/1998 0:00:00  
**DATE OF SITE CLOSURE:** 11/4/1999 0:00:00  
**SOURCE:** UST-HEATING OIL,

**OWNER INFORMATION:**

**OWNER:** BENNINGTON POTTERY  
**OWNER ADDRESS:** 324 COUNTY ST  
BENNINGTON VT 05201



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 30                      **DIST/DIR:** 0.62 NW                      **MAP ID:** 29

<b>NAME:</b> JOHNSONS FUEL SERVICE INC	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> 99 NORTHSIDE DRIVE BENNINGTON VT	<b>ID1:</b> 972152
	<b>ID2:</b>
	<b>STATUS:</b> ACTIVE
<b>CONTACT:</b>	<b>PHONE:</b>

**SITE INFORMATION**

<b>PRIORITY:</b>	THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)
<b>PROJECT STATUS:</b>	07/02: CONTINUING ANNUAL MONITORING AND SCREENING 25-CUBIC YARD STOCKPILE.
<b>DATE OF SITE DISCOVERY:</b>	3/1/1997 0:00:00
<b>DATE OF SITE CLOSURE:</b>	
<b>SOURCE:</b>	UST-GASOLINE,

**OWNER INFORMATION:**

<b>OWNER:</b>	JOHNSON FUEL SERVICE INC
<b>OWNER ADDRESS:</b>	268 BENMONT AVE BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 7                      **DIST/DIR:** 0.63 NW                      **MAP ID:** 11

**NAME:** 272 BEN MONT AVE.  
**ADDRESS:** 272 BEN MONT AVENUE  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 992660  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** DIRECTLY IMPACTED SENSITIVE RECEPTOR (VT SITE PRIORITY SCORE>60)  
**PROJECT STATUS:** QUARTERLY GROUNDWATER MONITORING ONGOING. AN ECOLOGICAL RISK  
CHARACTERIZATION WILL BE CONDUCTED ON THE WALLOMSAC RIVER TO DETERMINE THE EFFECT CONTAMINATION IS  
HAVING. A CORRECTIVE ACTION FEASIBILITY INVESTIGATION IS ALSO BEING DEVELOPED. CAFI SUBMITTED - OWNER  
SUING POTENTIAL RP - IN LITIGATION - TALKS RESUMING 10/05 - SHOULD GET CAP IMPLEMENTATION IN MOTION SOON -  
POTENTIAL PFP  
**DATE OF SITE DISCOVERY:** 8/1/1999 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** ABOVE GROUND STORAGE TANK, UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 34

**DIST/DIR:** 0.65 SW

**MAP ID:** 4

**NAME:** MARSON PROPERTY  
**ADDRESS:** 100 HUNT ST  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 982498  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** UNDERGROUND STORAGE TANK REMOVED. CONTAMINATION FOUND.  
INVESTIGATION NEEDED.  
**DATE OF SITE DISCOVERY:** 9/17/1998 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE, UST-HEATING OIL, WASTE OIL,

**OWNER INFORMATION:**

**OWNER:** MARSON INC  
**OWNER ADDRESS:** R R 1  
NORTH BENNINGTON VT 05257

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 47                      **DIST/DIR:** 0.65 SW                      **MAP ID:** 42

**NAME:** WASSICK TIRE  
**ADDRESS:** BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 880213  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE CLOSED AND COMBINED WITH 911095  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 27                      **DIST/DIR:** 0.65 SW                      **MAP ID:** 27

**NAME:** HUNT STREET GULF  
**ADDRESS:** BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 890417  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE CLOSED  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 41

**DIST/DIR:** 0.66 SW

**MAP ID:** 36

**NAME:** RT 7 CONTAMINATION  
**ADDRESS:** RT 7  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 911095  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** CERCLA NFRAP-ADDITIONAL SAMPLING TO BE CONDUCTED  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 2/1/1994 0:00:00  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 22                      **DIST/DIR:** 0.67 SW                      **MAP ID:** 24

**NAME:** EARLS SERVICE CENTER  
**ADDRESS:** 251 NORTH ST  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 962108  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** ANNUAL MONITORING OF STOCKPILED SOILS  
**DATE OF SITE DISCOVERY:** 10/1/1996 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** RONALD ALDERMAN  
**OWNER ADDRESS:** 251 NORTH ST  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 31                      **DIST/DIR:** 0.69 SE                      **MAP ID:** 30

**NAME:** JONES RESIDENCE  
**ADDRESS:** COUNTY STREET  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 982493  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** 5/01: FUEL OIL SPILL APPROXIMATELY 200 TO 400 GALLONS. SUBSURFACE IS GRAVELLY AND VERY TRANSMISSIVE. NO FREE PRODUCT WAS RECOVERABLE. CONCRETE SLAB WAS POURED IN BASEMENT AS A VAPOR BARRIER. NO CONTAMINATION HAS BEEN FOUND DURING INSPECTIONS OF THE ROARING BRANCH DOWNGRAIENT FROM THE JONES RESIDENCE. THE LAST INSPECTION WAS ON MAY 2, 2001.  
**DATE OF SITE DISCOVERY:** 10/1/1998 0:00:00  
**DATE OF SITE CLOSURE:** 5/28/2001 0:00:00  
**SOURCE:** SPILL, UST-HEATING OIL,

**OWNER INFORMATION:**

**OWNER:** RICHARD JONES  
**OWNER ADDRESS:** 1016 COUNTY STREET  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 12

**DIST/DIR:** 0.72 SW

**MAP ID:** 15

**NAME:** BENMONT PAPER PLANT  
**ADDRESS:** 219 BENMONT AVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 921268  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** CLOSED 8/19/92  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 8/19/1992 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** BENNINGTON TRUST  
**OWNER ADDRESS:** 266 BEACON ST  
BOSTON MA 02116



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 26

**DIST/DIR:** 0.73 SW

**MAP ID:** 26

**NAME:** HAYNES AND KANE INC  
**ADDRESS:** 215 BENMONT AVE  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 951775  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** HEATING OIL UST RELEASE. NO FREE PRODUCT NOTED SINCE 1996. ANNUAL GW  
SAMPLING, NEXT ROUND 6/2006. PAHS DETECTED THAT MAY BE FROM UPGRADIENT MGP SITE.  
**DATE OF SITE DISCOVERY:** 5/1/1995 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-HEATING OIL,

**OWNER INFORMATION:**

**OWNER:** HAYNES AND KANE INC  
**OWNER ADDRESS:** PO BOX 117  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 21                      **DIST/DIR:** 0.75 NW                      **MAP ID:** 23

**NAME:** CUMBERLAND FARMS #4006  
**ADDRESS:** 107 NORTHSIDE DRIVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 992612  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** UST REMOVED. CONTAMINATION FOUND. INVESTIGATION COMPLETE. 4/15/00 3  
MWS ND, 1 MW MTBE @ 190PPB, 10/31/00 4 MWS, BELOW VGES, 4/4/01 4 MWS ND. SMAC  
**DATE OF SITE DISCOVERY:** 5/4/1999 0:00:00  
**DATE OF SITE CLOSURE:** 6/12/2001 0:00:00  
**SOURCE:** UST-DIESEL, UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** CUMBERLAND FARMS INC  
**OWNER ADDRESS:** 777 DEDHAM ST  
CANTON MA 02021

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 20

**DIST/DIR:** 0.77 SW

**MAP ID:** 22

**NAME:** CATAMOUNT DYERS  
**ADDRESS:** BENMONT AVENUE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 770133  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** CAP COMPLETED NOVEMBER 1998. SITE SMACED 11/05/99.  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 11/5/1999 0:00:00  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:** SOUTHERN VERMONT DEVELOPMENT CORP.  
**OWNER ADDRESS:** 180-200 BENMONT AVENUE  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 28                      **DIST/DIR:** 0.78 SW                      **MAP ID:** 28

**NAME:** IDEAL FUELS AND FENCE CO  
**ADDRESS:** 259 BENMONT AVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 951774  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** SITE INVESTIGATION SHOWED GROUNDWATER AND SOIL CONTAMINATION AT  
LOW LEVELS. CONTAMINATION LIMITED TO SMALL AREA ON SITE. OWNER PLACED NOTICE ON LAND RECORD AND GOT  
SITE SMACED.  
**DATE OF SITE DISCOVERY:** 5/10/1995 0:00:00  
**DATE OF SITE CLOSURE:** 12/9/2003 0:00:00  
**SOURCE:** ABOVE GROUND STORAGE TANK, HEATING OIL,

**OWNER INFORMATION:**

**OWNER:** SAL SANTARCANGELO  
**OWNER ADDRESS:** 259 BENMONT AVE, P O BOX 49  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 19

**DIST/DIR:** 0.79 SW

**MAP ID:** 21

**NAME:** C V P S BENNINGTON  
**ADDRESS:** BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 900510  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE CLOSED  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 24                      **DIST/DIR:** 0.79 SW                      **MAP ID:** 25

<b>NAME:</b> EVEREADY BATTERY <b>ADDRESS:</b> 401 GAGE ST BENNINGTON VT BENNINGTON <b>CONTACT:</b>	<b>REV:</b> 10/27/05 <b>ID1:</b> 20053379 <b>ID2:</b> <b>STATUS:</b> ACTIVE <b>PHONE:</b>
--	---

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** DURING REPLACEMENT OF A TRANSFORMER CONTAM SOILS WERE FOUND.  
DETAILED WORKPLAN WILL FOLLOW. FIRST LETTER WRITTEN IN JUNE 2005. AD  
**DATE OF SITE DISCOVERY:** 6/14/2005 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** OTHER,

**OWNER INFORMATION:**

**OWNER:** EVEREADY BATTERY COMPANY  
**OWNER ADDRESS:** 75 SWANTON ROAD  
ST. ALBANS VT 05478

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 23

**DIST/DIR:** 0.79 SW

**MAP ID:** 25

**NAME:** EVEREADY BATTERY  
**ADDRESS:** 401 GAGE STREET  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 770098  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** EPA NFRAP 10/97. SITE SMACED IN NOVEMBER 1997.  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 11/3/1997 0:00:00  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:** EVEREADY BATTERY COMPANY  
**OWNER ADDRESS:** 75 SWANTON ROAD  
ST. ALBANS VT 05478

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 48

**DIST/DIR:** 0.82 NW

**MAP ID:** 43

**NAME:** WILLOW ROAD GARAGE (TOWN OF BENNINGTON)  
**ADDRESS:** WILLOW RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 962041  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** UST REMOVED. CONTAMINATION FOUND. MONITORING WELLS SHOWED LOW  
LEVEL OF BTEX GROUNDWATER CONTAMINATION. STOCKPILED SOILS ON SITE.  
**DATE OF SITE DISCOVERY:** 1/1/1998 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** TOWN OF BENNINGTON  
**OWNER ADDRESS:** 205 SOUTH STREET  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 8                      **DIST/DIR:** 0.85 NW                      **MAP ID:** 12

**NAME:** AGWAY ENERGY PRODUCTS  
**ADDRESS:** 126 HICKS AVE  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 931355  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** PRODUCT RECOVERY COMPLETED, ANNUAL GROUNDWATER MONITORING OF  
FIVE ON-SITE MONITORING WELLS.  
**DATE OF SITE DISCOVERY:** 1/1/1993 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** SPILL, UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** AGWAY PETROLEUM CORP  
**OWNER ADDRESS:** P O BOX 4741  
SYRACUSE NY 13221

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 11                      **DIST/DIR:** 0.85 NW                      **MAP ID:** 14

**NAME:** AUTO CITY  
**ADDRESS:** 114 NORTHSIDE DR  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 921185  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** UST CONTAMINATION. INVEST. PROCEEDING. OWNER REFUSES TO COOPERATE.  
AS OF THIS UPDATE, (JULY 22ND, 1999) THERE HAS BEEN NO ACTIVITY IN THIS FILE SINCE APRIL 15, 1996.  
**DATE OF SITE DISCOVERY:** 1/1/1992 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** GEORGE AND ANGELA ALLARD  
**OWNER ADDRESS:** 114 NORTHSIDE DR  
BENNINGTON VT 05201



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 33                      **DIST/DIR:** 0.86 SW                      **MAP ID:** 31

**NAME:** MACE SECURITY  
**ADDRESS:** 160 BENMONT AVE  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 972301  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** SEE SITE NUMBER 770133 - CATAMOUNT DYERS, BENNINGTON. SITE SMACED  
NOVEMBER 1999.  
**DATE OF SITE DISCOVERY:** 12/1/1997 0:00:00  
**DATE OF SITE CLOSURE:** 11/5/1999 0:00:00  
**SOURCE:** UST-GASOLINE, OTHER,

**OWNER INFORMATION:**

**OWNER:** V E D A  
**OWNER ADDRESS:** 56 E STATE ST  
MONTPELIER VT 05602

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 42                      **DIST/DIR:** 0.89 NW                      **MAP ID:** 37

<b>NAME:</b> SAUSVILLE RESIDENCE	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> 155 NORTHSIDE DRIVE	<b>ID1:</b> 20012896
BENNINGTON VT	<b>ID2:</b>
BENNINGTON	<b>STATUS:</b> ACTIVE
<b>CONTACT:</b>	<b>PHONE:</b>

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** ABOVE GROUND TANK PIPING LEAK. WATER SAMPLED. INVESTIGATION NEEDED  
TO DETERMINE DEGREE AND EXTENT OF CONTAMINATION.  
**DATE OF SITE DISCOVERY:** 5/18/2001 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** HEATING OIL, ABOVE GROUND STORAGE TANK,

**OWNER INFORMATION:**

**OWNER:** ROBERT SAUSVILLE  
**OWNER ADDRESS:** 155 NORTHSIDE DRIVE  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 39

**DIST/DIR:** 0.91 SW

**MAP ID:** 35

**NAME:** NOWLES  
**ADDRESS:** BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 880178  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE CLOSED  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 10

**DIST/DIR:** 0.94 SW

**MAP ID:** 13

**NAME:** APOLLO INDUSTRIES/JOHNSON FUELS  
**ADDRESS:** 127 RIVER ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 992634  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** UNDERGROUND STORAGE TANK REMOVED. CONTAMINATION FOUND. NO  
GROUNDWATER IMPACTS ABOVE STANDARDS. CONTAMINATED SOILS EXCAVATED AND DISPOSED OF AT EMSI OF NY.  
**DATE OF SITE DISCOVERY:** 5/3/1999 0:00:00  
**DATE OF SITE CLOSURE:** 5/15/2000 0:00:00  
**SOURCE:** ABOVE GROUND STORAGE TANK,

**OWNER INFORMATION:**

**OWNER:** ULTRAMAR,INC  
**OWNER ADDRESS:** 27450 BLVD, LES GALERIES D ANJOU  
ANJOU QUEBEC CAN HIM-3M3

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 46

**DIST/DIR:** 0.94 SW

**MAP ID:** 41

**NAME:** VT STATE LIQUOR STORE  
**ADDRESS:** DEPOT ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 921255  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** ASSESS COMPLETE, G W NOT CONTAM ABOVE STANDARDS, SOIL CLEAN, ON-SITE  
**DATE OF SITE DISCOVERY:** 4/6/1992 0:00:00  
**DATE OF SITE CLOSURE:** 7/1/1994 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** DEPOT PROPERTIES C/O BETTY RILEY  
**OWNER ADDRESS:** MOUNTAIN VIEW DRIVE  
SHAFTSBURY VT 05262



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 6                      **DIST/DIR:** 0.95 SW                      **MAP ID:** 10

<b>NAME:</b> 120 BENMONT AVE <b>ADDRESS:</b> 120 BENMONT AVE BENNINGTON VT BENNINGTON <b>CONTACT:</b>	<b>REV:</b> 10/27/05 <b>ID1:</b> 20012935 <b>ID2:</b> <b>STATUS:</b> ACTIVE <b>PHONE:</b>
---	---

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** AST FAILURE. LIMITED SOIL REMOVED. 1/02 2 OF 6 MWS ABOVE VGES. 4/02 ALL  
MWS BELOW VGES. SEMI-ANNUAL VAPOR MONITORING OF MW AND SVE SYSTEM HEADSPACE REQUIRED. 1/03 MAX PID  
=10.1 PPM IN SVE WELL  
**DATE OF SITE DISCOVERY:** 10/27/2001 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** ABOVE GROUND STORAGE TANK,

**OWNER INFORMATION:**

**OWNER:** REGIONAL AFFORDABLE HOUSING CORP  
**OWNER ADDRESS:** P O BOX 1247  
BENNINGTON VT 05201

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 35

**DIST/DIR:** 0.96 SE

**MAP ID:** 32

**NAME:** MINCER MINIMART  
**ADDRESS:** BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 870078  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** SITE CLOSED  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:**

**OWNER INFORMATION:**

**OWNER:**  
**OWNER ADDRESS:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 43

**DIST/DIR:** 0.97 SE

**MAP ID:** 38

**NAME:** STEWARTS SHOP  
**ADDRESS:** 713 MAIN ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 972212  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** UST REMOVAL. CONTAMINATION FOUND. INVESTIGATION SHOWED NO GW  
IMPACTS.  
**DATE OF SITE DISCOVERY:** 5/1/1997 0:00:00  
**DATE OF SITE CLOSURE:** 11/1/1998 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** STEWARTS ICE CO INC  
**OWNER ADDRESS:** P O BOX 435  
SARATOGA SPRINGS NY 12866

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 38

**DIST/DIR:** 0.98 SW

**MAP ID:** 34

**NAME:** NEW ENGLAND TELEPHONE  
**ADDRESS:** 126 PLEASANT ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 931381  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO FURTHER ACTION PLANNED  
**PROJECT STATUS:** INVEST COMPLETE  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:** 7/1/1994 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** BELL ATLANTIC  
**OWNER ADDRESS:** 125 HIGH ST, ROOM 1006  
BOSTON MA 02110

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 17

**DIST/DIR:** 0.98 SW

**MAP ID:** 19

**NAME:** BENNINGTON TOWN GARAGE  
**ADDRESS:** DEPOT ST  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 962018  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** GROUND WATER STANDARDS MET ON ENTIRE SITE. SITE CLOSED.SITE  
INVESTIGATION EXPRESSWAY NOTIFICATION REC 6/21/96  
**DATE OF SITE DISCOVERY:** 6/1/1996 0:00:00  
**DATE OF SITE CLOSURE:** 6/22/1998 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** TOWN OF BENNINGTON  
**OWNER ADDRESS:** 205 SOUTH STREET  
BENNINGTON VT 05201



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 18

**DIST/DIR:** 0.99 SW

**MAP ID:** 20

**NAME:** C & R GETTY  
**ADDRESS:** 636 MAIN  
BENNINGTON VT

**REV:** 12/27/01  
**ID1:** 931420  
**ID2:**  
**STATUS:** CLOSED  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** SITES MANAGEMENT ACTIVITY COMPLETED  
**PROJECT STATUS:** MTBE LEVELS ABOVE VGES IN ONE MW. SEMI-ANNUAL SAMPLING OF ALL FOUR  
MWS DONE. GW CONTAMINATION HAS BEEN REDUCED TO BELOW VGES AND LAB DETECTION LIMITS. THE MWS HAVE  
BEEN PROPERLY ABANDONED AND SITE SMACED.  
**DATE OF SITE DISCOVERY:** 7/1/1993 0:00:00  
**DATE OF SITE CLOSURE:** 9/23/2002 0:00:00  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** POWER TEST REALTY CO. - C/O GETTY PETROLEUM  
**OWNER ADDRESS:** 125 JERCHO TURNPIKE  
JERICHO NY 11753

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

STATE SITE

**SEARCH ID:** 13

**DIST/DIR:** 1.00 SW

**MAP ID:** 16

**NAME:** BENNINGTON GARAGE  
**ADDRESS:** ROUTE 9  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 900645  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** NO SENSITIVE RECEPTOR IMPACT (VT SITE PRIORITY SCORE<30)  
**PROJECT STATUS:** UST CONTAMINATION, INVEST COMPLETE. MONITORING ONGOING. ECS TO  
PERFORM GROUNDWATER MONITORING 11/01  
**DATE OF SITE DISCOVERY:**  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** ROBERT COLLINS  
**OWNER ADDRESS:** 51 GREENWICH RD  
LONGMEADOW MA 01106

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SITE**

**SEARCH ID:** 44                      **DIST/DIR:** 1.00 SW                      **MAP ID:** 39

**NAME:** TUTTLES TRUE VALUE  
**ADDRESS:** DEPOT ST  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 982341  
**ID2:**  
**STATUS:** ACTIVE  
**PHONE:**

**CONTACT:**

**SITE INFORMATION**

**PRIORITY:** THREATENED SENSITIVE RECEPTOR (30 >= VT SITE PRIORITY SCORE <= 60)  
**PROJECT STATUS:** 07/02: MONITORING ONGOING.  
**DATE OF SITE DISCOVERY:** 3/1/1998 0:00:00  
**DATE OF SITE CLOSURE:**  
**SOURCE:** UNKNOWN, UST-GASOLINE,

**OWNER INFORMATION:**

**OWNER:** WALTER E. FREED  
**OWNER ADDRESS:** R R 2, BOX 278 A  
N. CLARENDEN VT 05759

**Environmental FirstSearch  
Site Detail Report**

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 68                      **DIST/DIR:** NON GC                      **MAP ID:**

<b>NAME:</b> FORMER DANIEL FAGER S FACILITY	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> 1092 NORTH BENNINGTON ROAD (RTE 67A) BENNINGTON VT 05201	<b>ID1:</b> 672
	<b>ID2:</b> 20053341.00
<b>CONTACT:</b>	<b>STATUS:</b>
	<b>PHONE:</b>

**OWNER AND OPERATOR INFORMATION**

<b>OWNER NAME:</b> JONOCO, INC. 100 MARILYN STREET BENNINGTON VT, 05201	<b>OWNER PERSON:</b>
---	----------------------

<b>OPERATOR NAME:</b> JONOCO, INC.	<b>OPERATOR PERSON:</b>
------------------------------------	-------------------------

**LANDOWNER:**

**FACILITY TYPE:** SERVICE STATION

**PERMITTED TO:**

**SITE FINDINGS:**

CONTAMINATION FOUND ABOVE STATE STANDARD. REFERRED TO SITE MANAGEMENT

**NUMBER OF TANKS PULLED:** 2/1

**NUMBER OF GROUNDWATER MONITORING WELLS:**

**NUMBER OF VAPOR MONITORING WELLS:**

**COMMENTS:** 1986/2005 Site Assessment done in 2005. Contamination present.

**TANK INFORMATION**

<b>TANK ID:</b> 1946-1	<b>DATE OUT OF SERVICE:</b>
<b>YEAR REMOVED:</b> 1986	<b>SUBSTANCE STORED:</b> GASOLINE
<b>TANK CAPACITY IN GALL.:</b> 1000	
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

**TANK INFORMATION**

<b>TANK ID:</b> -1-1-R	<b>DATE OUT OF SERVICE:</b>
<b>YEAR REMOVED:</b> 2005	<b>SUBSTANCE STORED:</b> #2 OR #4 FUEL OIL
<b>TANK CAPACITY IN GALL.:</b> 500	
<b>TANK PROTECTION:</b>	

**TANK INFORMATION**

<b>TANK ID:</b> 1956-2	<b>DATE OUT OF SERVICE:</b>
<b>YEAR REMOVED:</b> 1986	<b>SUBSTANCE STORED:</b> GASOLINE
<b>TANK CAPACITY IN GALL.:</b> 1000	
<b>TANK PROTECTION:</b> UNPROTECTED STEEL	

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**LEAKING UNDERGROUND STORAGE TANKS**

**SEARCH ID:** 67                      **DIST/DIR:** NON GC                      **MAP ID:**

**NAME:** FORMER A. BROWN PROPERTY  
**ADDRESS:** NORTH STREET, N. BENNINGTON  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 9999614  
**ID2:**  
**STATUS:**  
**PHONE:**

**CONTACT:**

**OWNER AND OPERATOR INFORMATION**

**OWNER NAME:** COMMUNITY EXCHANGE & DEV. CORP. **OWNER PERSON:**  
BOX 698  
N. BENNINGTON VT, 05257

**OPERATOR NAME:** COMMUNITY EXCHANGE & DEV. CORP. **OPERATOR PERSON:**

**LANDOWNER:**

**FACILITY TYPE:** INDUSTRIAL/COMMERCIAL  
**PERMITTED TO:**  
**SITE FINDINGS:**  
NO CONTAMINATION FOUND

**NUMBER OF TANKS PULLED:** 1  
**NUMBER OF GROUNDWATER MONITORING WELLS:**  
**NUMBER OF VAPOR MONITORING WELLS:**  
**COMMENTS:** 1994

**TANK INFORMATION**

<b>TANK ID:</b>	-1-1	<b>DATE OUT OF SERVICE:</b>	
<b>YEAR REMOVED:</b>	1994	<b>SUBSTANCE STORED:</b>	#2 OR #4 FUEL OIL
<b>TANK CAPACITY IN GALL.:</b>	575		
<b>TANK PROTECTION:</b>	UNPROTECTED STEEL		



***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**RCRA GENERATOR SITE**

**SEARCH ID:** 62

**DIST/DIR:** NON GC

**MAP ID:**

**NAME:** BENNINGTON AUTO TECH INC  
**ADDRESS:** 1089 N BRANCH ST  
BENNINGTON VT 05201  
BENNINGTON  
**CONTACT:** ED RAETZ

**REV:** 12/10/05  
**ID1:** VTR000509539  
**ID2:**  
**STATUS:** VGN  
**PHONE:** 8024472235

**SITE INFORMATION**

**CONTACT INFORMATION:** ED RAETZ  
N BRANCH ST  
BENNINGTON VT 05201

**PHONE:** 8024472235

**VIOLATION INFORMATION:**

**HAZARDOUS WASTE INFORMATION:**

VT02

**UNIVERSE INFORMATION:**

**SNC:** N - NO  
**BOYSNC:** N - NO  
**GPRA PERMIT:** N - NO  
**GPRA POSTCLOSURE:** N - NO  
**GPRA CA:** N - NO  
**GPRA CME:** N - NO  
**PERM PROG:** ----  
**PREM WR**

**HANDLER INFORMATION:**

**SECOND ID:**

**ACCESSIBILITY:**

**FED WSTE GEN OWNER:**

**STATE WSTE GEN OWNER:**

HQ  
VT

**OFF SITE RECEIPT:**

**COUNTY OWNER:**

**FED WASTE GEN:** 3

**STATE WSTE GEN:** 3

**NAIC INFORMATION**

811111 - GENERAL AUTOMOTIVE REPAIR

**ENFORCEMENT INFORMATION:**

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 63

**DIST/DIR:** NON GC

**MAP ID:**

**NAME:** AGWAY  
**ADDRESS:** PARK ST  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 95-WMD033  
**ID2:**  
**STATUS:**  
**PHONE:**

**CONTACT:** PAT BOGDAL

**DATE OF INCIDENT:**

**TIME OF INCIDENT:**

**DATE CLOSED:** 2/8/1995 0:00:00

**REPORTED BY:** PAT BOGDAL

**REPORTER S ORGANIZATION:** AGWAY

**REPORTER S WORK PHONE:**

**TYPE OF INCIDENT:** MALFUNCTION OF AIR ELIMINATTOR ON DELIVERY TRUCK

**PRODUCT:** #2

**QUANTITY:** 4

**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** AGWAY PETROLEUM

**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:** SPILLS

**ACTIONS TAKEN:** AGWAY CLEAN UP AND STORAGE AT BULK PLANT

**COMMENTS:** INFO GIVEN

**DATE CLOSED:** 2/8/1995 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 64

**DIST/DIR:** NON GC

**MAP ID:**

**NAME:** BENNINGTON AOT  
**ADDRESS:** BOWEN RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 02-WMD221  
**ID2:**  
**STATUS:**  
**PHONE:** 828-2797

**CONTACT:** MIKE MORRISSETTE

**DATE OF INCIDENT:** 7/3/2002 0:00:00  
**TIME OF INCIDENT:** 1300  
**DATE CLOSED:** 7/3/2002 0:00:00  
**REPORTED BY:** MIKE MORRISSETTE  
**REPORTER S ORGANIZATION:** AOT  
**REPORTER S WORK PHONE:** 828-2797

**TYPE OF INCIDENT:** HYDRAULIC HOSE BLEW  
**PRODUCT:** HYDRAULIC OIL  
**QUANTITY:** 10  
**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** AOT  
**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:** SPILLS  
**ACTIONS TAKEN:** PRODUCT WET-VACCED. SAND APPLIED BY AOT.  
**COMMENTS:**  
**DATE CLOSED:** 7/3/2002 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 65

**DIST/DIR:** NON GC

**MAP ID:**

**NAME:** STATE HIGHWAY GARAGE  
**ADDRESS:** 359 BOWEN RD  
BENNINGTON VT

**REV:** 10/27/05  
**ID1:** 04-WMD112  
**ID2:**  
**STATUS:**  
**PHONE:** 802-338-3316

**CONTACT:** MIKE O HARA

**DATE OF INCIDENT:** 3/30/2004 0:00:00  
**TIME OF INCIDENT:** 0  
**DATE CLOSED:** 4/13/2004 0:00:00  
**REPORTED BY:** MIKE O HARA  
**REPORTER S ORGANIZATION:** ARMY NATIONAL GUARD  
**REPORTER S WORK PHONE:** 802-338-3316

**TYPE OF INCIDENT:** M-1 ABRAMS HAD LEAKING FUEL TANK  
**PRODUCT:** JP8 FUEL  
**QUANTITY:** 50  
**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** ARMY NATIONAL GUARD  
**ADDRESS:**

**RESPONSIBLE PARTY S PHONE:** 802-338-3405

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:** SPILLS  
**ACTIONS TAKEN:** RP EXCAVATED SOIL AND TEMP. STOCKPILED ON-SITE. SHIPPING TO  
MAXYMILLIAN TECH. IN MA ON OR AROUND 4/16/04.  
**COMMENTS:** CONTAINED LEAK AND OFF-LOADED TANK. SOIL IMPACTED. MIKE YOUNG IS  
OVERSEEING THE WORK.  
**DATE CLOSED:** 4/13/2004 0:00:00

***Environmental FirstSearch  
Site Detail Report***

**TARGET SITE:** 222 BOWEN ROAD  
BENNINGTON VT 05201

**JOB:** B 360  
PHASE I UPDATE FEB 2006

**STATE SPILLS SITE**

**SEARCH ID:** 66                      **DIST/DIR:** NON GC                      **MAP ID:**

<b>NAME:</b>	<b>REV:</b> 10/27/05
<b>ADDRESS:</b> NORTH BRANCH ST BENNINGTON VT	<b>ID1:</b> 93-052
	<b>ID2:</b>
	<b>STATUS:</b>
<b>CONTACT:</b> TOM DIPALO	<b>PHONE:</b> 442-1051

**DATE OF INCIDENT:**  
**TIME OF INCIDENT:**  
**DATE CLOSED:** 3/9/1993 0:00:00  
**REPORTED BY:** TOM DIPALO  
**REPORTER S ORGANIZATION:** BENNINGTON FIRE DEPT  
**REPORTER S WORK PHONE:** 442-1051

**TYPE OF INCIDENT:** GAS TANK FELL OFF TRUCK  
**PRODUCT:** GASOLINE  
**QUANTITY:** 2  
**UNIT OF MEASURE:** G

**RESPONSIBLE PARTY:** ED HURLEY  
**ADDRESS:** UNADILLA TRAILER PARK  
BENNINGTON VT  
**RESPONSIBLE PARTY S PHONE:**

**SURFACE WATER AFFECTED:**

**CASE ASSIGNED TO:**  
**ACTIONS TAKEN:** REPORT TAKEN - F.D. CLEAN UP  
**COMMENTS:** NO PRODUCT TO STORM SYSTEM  
**DATE CLOSED:** 3/9/1993 0:00:00



## Environmental FirstSearch Database Descriptions

**NPL: EPA** NATIONAL PRIORITY LIST - Database of confirmed, proposed or deleted Superfund sites.

**CERCLIS: EPA** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM - Database of current and potential Superfund sites currently or previously under investigation.

**NFRAP: EPA** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

**RCRA TSD: EPA** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of facilities licensed to store, treat and dispose of hazardous waste materials.

**RCRA COR: EPA** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of RCRA facilities with reported violations and subject to corrective actions.

**RCRA GEN: EPA** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities that generate or transport hazardous waste or meet other RCRA requirements. LGN - Large Quantity Generators SGN - Small Quantity Generators VGN - Conditionally Exempt Generator. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

**ERNS: EPA/NRC** EMERGENCY RESPONSE NOTIFICATION SYSTEM - Database of emergency response actions. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

**STATE SITES: VT DEC** ACTIVE AND CLOSED HAZARDOUS SITES LIST - database of active and closed hazardous waste sites. The data includes priority, project status, source, date of site discovery, date of site closure, and owner information.

**SPILLS-1990: VT DEC** VERMONT SPILLS DATABASE - database of spills reported to the Vermont Department of Environmental Conservation. The data includes information regarding incident date, type of incident, reporter, responsible party, and action taken.

**SWL:** *VT DEC* SOLID WASTE MANAGEMENT FACILITIES LIST - database of both landfills and transfer stations for the state of Vermont. The list includes contact information for each site.

**REG UST/AST:** *VT DEC* REGISTERED UNDERGROUND STORAGE TANKS LIST - database of underground storage tanks registered with the Vermont Department of Environmental Conservation. The data includes facility type, owner contact information, and tank substance, protection, and capacity.

**LEAKING UST:** *VT DEC* PULLED UNDERGROUND STORAGE TANKS LIST - database of tanks that have been pulled/removed due to a leak. Under state law any tank that has reported a leak must be pulled/removed. The data includes owner and operator name, facility type, and tank information.

**RADON:** *NTIS* NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

## Environmental FirstSearch Database Sources

**NPL: EPA** Environmental Protection Agency

*Updated quarterly*

**CERCLIS: EPA** Environmental Protection Agency

*Updated quarterly*

**NFRAP: EPA** Environmental Protection Agency.

*Updated quarterly*

**RCRA TSD: EPA** Environmental Protection Agency.

*Updated quarterly*

**RCRA COR: EPA** Environmental Protection Agency.

*Updated quarterly*

**RCRA GEN: EPA** Environmental Protection Agency.

*Updated quarterly*

**ERNS: EPA/NRC** Environmental Protection Agency

*Updated semi-annually*

**STATE SITES: VT DEC** Vermont Department of Environmental Conservation

*Updated quarterly*

**SPILLS-1990: VT DEC** Vermont Department of Environmental Conservation

*Updated quarterly*

**SWL: VT DEC** Vermont Department of Environmental Conservation, Solid Waste Management Division

*Updated annually*

**REG UST/AST: VT DEC** Vermont Department of Environmental Conservation, Hazardous Materials Management Division

*Updated quarterly*

**LEAKING UST:** *VT DEC* Vermont Department of Environmental Conservation, Hazardous Materials Management Division

*Updated quarterly*

**RADON:** *NTIS* Environmental Protection Agency, National Technical Information Services

*Updated periodically*

***Environmental FirstSearch***  
***Street Name Report for Streets within 1 Mile(s) of Target Property***

**TARGET SITE:** 222 BOWEN ROAD  
 BENNINGTON VT 05201

**JOB:** B 360  
 PHASE I UPDATE FEB 2006

Street Name	Dist/Dir	Street Name	Dist/Dir
Adams St	0.71 SW	Hunt St	0.56 SW
Anthony Dr	0.86 SW	Hunt St WEST	0.56 SW
Baker Dr	0.70 SE	Hutton St	0.60 SE
Bakers Dr	0.63 SE	John St	0.69 SE
Bank St	0.80 NW	Justin Ave	0.58 NE
Beech St	0.95 SE	Knapp Dr	0.90 SE
Benmont Ave	0.60 SW	Kocher Dr	0.22 NW
Bennington Sq	0.33 NW	Leonard St	0.72 SW
Birch Dr	0.87 SW	Lincoln St	0.75 SW
Bowen Rd	0.06 NW	Little League Rd	0.16 SW
Bradford St	0.66 SE	Lyons St	0.53 SE
Bradley Dr	0.56 NE	Maple St	0.58 SW
Branch St	0.09 NE	McKinley St	0.98 SW
Browning St	0.66 SW	Morgan St	0.95 SE
Caroline Dr	0.94 SE	Mountain View Rd	0.28 SE
Carpenter Ln	0.12 NE	North St	0.63 SW
Carrigan Ln	0.66 SW	Northside Dr	0.62 NW
Chapel Rd	0.27 SE	Orchard Rd	0.92 NW
Charles St	0.63 SE	Pageant St	0.76 SW
Congress St	0.52 SE	Park St	0.17 SW
Convent Ave	0.91 SW	Pleasant St	0.92 SE
Coolidge Ave	0.87 SE	Pratt St	0.80 SW
Country Club Rd	0.96 SW	River St	0.80 SW
Depot St	0.65 SW	Safford St	0.59 SE
Division Pl	0.69 SW	School St	0.62 SW
Division St	0.57 SW	Scott St	0.84 SW
East County St	0.57 SW	Sharon Dr	0.85 SW
East Main St	0.95 SE	Shepard St	0.90 NW
East Rd	0.22 NW	Shields Dr	0.30 NW
Eastview Dr	0.99 SW	Spring St	0.66 SW
Furnace Brook Rd	0.11 NE	Tinkham West	0.85 SE
Gage Pl	0.94 SE	United States Highwa	0.53 NW
Gage St	0.76 SW	Valentine St	0.94 SW
Garbrooke Rd	0.32 NE	Veterans Memorial Dr	0.55 SW
Goodall St	0.62 SE	Waite Dr	1.00 NW
Governor Robinson Av	0.68 NW	Warn St	0.70 SE
Grove St	0.56 SE	West County St	0.67 SW
Hamlin Ave	0.97 SE	Willow Brook Dr	0.81 NW
Hawks Pl	0.64 SW	Willow Rd	0.81 NW
Hewitt Dr	0.75 NW	Woodland Dr	0.85 SW
Hicks Ave	0.81 NW		
Holden St	0.89 SW		



**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	5 feet below surface grade

	Casing	Sample	Core	Well
Type	PVC	--	--	PVC
Diameter	1 inch	--	--	1 inch
Weight	--	--	--	--
Fall	--	--	--	--

PENETRATION RESISTANCE			
140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

Page 158 of 434

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	5 feet below surface grade

	Type & Quantity
Sand	NA
Bentonite	NA
Cement	
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	PVC	--	--	PVC
Diameter	1 inch	--	--	1 inch
Weight	--	--	--	--
Fall	--	--	--	--

[illegible]

PENETRATION RESISTANCE			
140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS				
trace	0 to 10%	clay	<u>cl</u>	veryfine	trace	<u>tr</u>
little	10 to 20%	silt	<u>slt</u>	fine	little	<u>lt</u>
some	20 to 35%	sand	<u>snd</u>	medium	some	<u>sm</u>
and	35 to 50%	gravel	<u>gvl</u>	coarse	and	<u>+</u>

<b>MW-3 (IB)</b>			
Well/Boring No. <b>MW-3(IB)</b>			
Sheet	1	Of	1

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	4.5 feet below surface grade

Type & Quantity	
Sand	NA
Bentonite	NA
Cement	
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	PVC	--	--	PVC
Diameter	1 inch	--	--	1 inch
Weight	--	--	--	--
Fall	--	--	--	--

Depth Ft	Blows Per 6"	Recov (in.)	PID (ppm)	Sample Description	General Stratigraphy	Well Construction	
0	NA	24.0	152.0	Brown M sand, little F sand, trace gravel Dry	Sand and gravel		Concrete
						----	PVC riser 0-2"
						----	0.010 Screen 2'-10'
5	NA	24.0	84.7	Brown gravel and C-M sand. Wet	Gravel and sand	----	No.1 Sand 1'-10'
						----	
						----	
10				End of boring at 10 feet below surface grade.		----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	
						----	

PENETRATION RESISTANCE 140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Stiff
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS			
trace	0 to 10%	clay	cl	veryfine	trace
little	10 to 20%	silt	silt	fine	little
some	20 to 35%	sand	snd	medium	some
and	35 to 50%	gravel	gvl	coarse	and



<b>B-2</b>			
Well/Boring No.	<b>B-2</b>		
Sheet	1	Of	1

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	5 feet below surface grade

Type & Quantity	
Sand	NA
Bentonite	NA
Cement	NA
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	--	--	--	--
Diameter	--	--	--	--
Weight	--	--	--	--
Fall	--	--	--	--

Depth Ft	Blows Per 6"	Recov (in.)	PID (ppm)	Sample Description	General Stratigraphy	Well Construction	
0	NA	24.0	459.0	Brown-black F-M sand, some silt and gravel. Dry	Sand and gravel		
5	NA	18.0	244.0	Brown C-M sand, some gravel Wet	Sand and gravel		
10				End of boring at 10 feet below surface grade.			

PENETRATION RESISTANCE 140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS				
trace	0 to 10%	clay	cl	veryfine	vf	trace
little	10 to 20%	silt	silt	fine	f	little
some	20 to 35%	sand	snd	medium	me	some
and	35 to 50%	gravel	gvl	coarse	c	and





<b>B-4</b>			
Well/Boring No. <b>B-4</b>			
Sheet	1	Of	1

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	5 feet below surface grade

Type & Quantity	
Sand	NA
Bentonite	NA
Cement	NA
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	--	--	--	--
Diameter	--	--	--	--
Weight	--	--	--	--
Fall	--	--	--	--

Depth Ft	Blows Per 6"	Recov (in.)	PID (ppm)	Sample Description	General Stratigraphy	Well Construction	
0	NA	39.0	87.9	0-1' Brn-grey gravel and C sand	Sand		
				1'-3.25' Brn-blk M-F sand, some C sand, little gravel.			
				Dry			
5	NA	24.0	50.2	Brown gravel and M-C sand	Gravel and sand		
				Wet			
				End of boring at 8 feet below surface grade.			
10							

PENETRATION RESISTANCE 140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS					
trace	0 to 10%	clay	cl	veryfine	trace	tr	
little	10 to 20%	silt	silt	fine	little	lt	
some	20 to 35%	sand	snd	medium	some	sm	
and	35 to 50%	gravel	gvl	coarse	and	+	





<b>B-7</b>			
Well/Boring No. <b>B-7</b>			
Sheet	1	Of	1

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	1 foot below surface grade

Type & Quantity	
Sand	NA
Bentonite	NA
Cement	NA
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	--	--	--	--
Diameter	--	--	--	--
Weight	--	--	--	--
Fall	--	--	--	--

Depth Ft	Blows Per 6"	Recov (in.)	PID (ppm)	Sample Description	General Stratigraphy	Well Construction	
0	NA	30.0	23.8	Brown M sand and gravel Wet	Sand and gravel		
5	NA	24.0	29.8	Brown C gravel, some M-C sand Wet	Gravel and sand		
10				Refusal at 9 feet below surface grade.			

PENETRATION RESISTANCE 140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS				
trace	0 to 10%	clay	cl	veryfine	trace	tr
little	10 to 20%	silt	silt	fine	little	lt
some	20 to 35%	sand	snd	medium	some	sm
and	35 to 50%	gravel	gvl	coarse	and	+

<b>Trench Drain Boring</b>			
Well/Boring No. <b>Trench Drain Boring</b>			
Sheet	1	of	1

**TEST BORING / WELL CONSTRUCTION LOG**  
*Tighe & Bond Consulting Engineers, Westfield, Massachusetts*

Project:	U.S. Tsubaki
Client:	U.S. Tsubaki
Purpose:	Environmental Site Investigation
Drilling Contractor:	Technical Drilling Services
Driller:	Tim

Job Number:	B-0360-5-69 (1160)
Date Started:	2/9/2006
T&B Inspector:	JMP
Rig Type:	Geoprobe 6610 DT
Groundwater Depth:	1 feet below surface grade

	Type & Quantity
Sand	NA
Bentonite	NA
Cement	NA
Casing/Cap	NA

	Casing	Sample	Core	Well
Type	--	--	--	--
Diameter	--	--	--	--
Weight	--	--	--	--
Fall	--	--	--	--

[illegible]

PENETRATION RESISTANCE			
140 Lb. Wt. Falling 30" on 2" O.D. Sampler			
Cohesionless	Density	Cohesive	Consistency
0-4	Very Loose	0-2	Very Soft
5-9	Loose	3-4	Soft
10-29	Med. Dense	5-8	Med. Soft
30-49	Dense	9-15	Med. Stiff
50+	Very Dense	16-30	Very Stiff

PROPORTIONS USED		ABBREVIATIONS				
trace	0 to 10%	clay	<u>cl</u>	veryfine	trace	<u>tr</u>
little	10 to 20%	silt	<u>silt</u>	fine	little	<u>lt</u>
some	20 to 35%	sand	<u>snd</u>	medium	some	<u>sm</u>
and	35 to 50%	gravel	<u>gvl</u>	coarse	and	<u>+</u>

\*Top of PVC is 2.9" below concrete slab floor.

TIGHE & BOND - WESTFIELD

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Page 1 of 3

Static water level 5.07'

Location (Site/Facility Name) US Tsubaki, Bennington VT  
 Well number MW-3 (1B) Date 2-16-06  
 Field personnel JMP  
 Sampling organization T & B  
 Identify measuring pt. (MP) ~~2.9" below concrete slab floor~~ Concrete slab floor

Top of screen (ft. below MP) \_\_\_\_\_  
 Bottom of screen (ft. below MP) 9.35'  
 Pump intake (ft. below MP) ~ 7.5'  
 Purging device (pump type) Peristaltic pump  
 Water quality meter(s) Horiba Ubb, LaMotte

Clock Time (24 hr)	Water Depth (ft. below MP)	Pump Dial <sup>1</sup>	Purge Rate (ml/min)	Cum. Volume Purged (liters)	Temp. (°C) 3%	Spec. Cond. <sup>2</sup> (mS/cm) 3%	pH ±0.1 unit	ORP/ Eh <sup>3</sup> (mV) ±10 mV	DO (mg/L) 10%	Turbidity (NTU) 10%	Comments
950	5.08'		150		6.40	0.183	6.48	162	11.06	422	
955	5.09'				6.13	0.149	6.64	158	10.70	452	
1000	5.09'				5.88	0.145	6.71	156	10.92	213	
1005	5.10'				5.56	0.137	6.85	153	11.24	129	
1010	5.09'				5.50	0.137	6.89	152	11.58	95.1	
1015	5.09'				5.30	0.134	7.03	150	11.65	37.1	
1020	5.09'				5.33	0.135	7.06	150	11.66	20.2	
1025	5.10'				5.28	0.135	7.07	150	11.61	20.1	
1030	5.09'				5.65	0.132	7.16	149	11.54	16.7	
1035	5.09'				5.47	0.132	7.19	149	11.18	16.1	
1040	—————→										Collected GW Sample Purged ~ 2.75 gallons

1. Pump dial setting (for example: hertz, cycles/min., etc.)

2. 0.1 S/m = 1 mS/cm = 1,000 µS/cm = 1,000 µmhos/cm.

3. Oxidation reduction potential (stand in for Eh).

EPA parameter stabilization limits are noted; turbidity limit applies to values greater than 1 NTU.

000018

000009



## TIGHE &amp; BOND - WESTFIELD

## WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Page 2 of 3

Static water level: 6.33' below concrete floor slab

Location (Site/Facility Name) <u>US Tsubaki, Bennington VT</u>							Top of screen (ft. below MP) _____				
Well number <u>MW-1 (1B)</u>			Date <u>2-16-06</u>				Bottom of screen (ft. below MP) <u>9.5'</u>				
Field personnel <u>JMP</u>							Pump intake (ft. below MP) <u>~8'</u>				
Sampling organization <u>T + B</u>							Purging device (pump type) <u>Peristaltic pump</u>				
Identify measuring pt. (MP) <u><del>Tap at well</del> Concrete floor slab</u>							Water quality meter(s) <u>Horiba Udd, La Motte</u>				
Clock Time (24 hr)	Water Depth (ft. below MP)	Pump Dial <sup>1</sup>	Purge Rate (ml/min)	Cum. Volume Purged (liters)	Temp. (°C) 3%	Spec. Cond. <sup>2</sup> (mS/cm) 3%	pH ±0.1 unit	ORP/ Eh <sup>3</sup> (mV) ±10 mV	DO (mg/L) 10%	Turbidity (NTU) 10%	Comments
1120	6.34'		150		5.32	0.150	7.22	153	11.40	487	
1125	6.33'				5.54	0.149	7.24	151	10.66	571	
1130	6.34'				5.14	0.151	7.23	152	10.83	466	
1135	6.33'				4.87	0.138	7.24	154	12.89	172	
1140	6.34'				4.91	0.133	7.23	155	12.58	120	
1145	6.34'				4.75	0.133	7.22	157	12.21	24.2	
1150	6.34'				4.75	0.132	7.21	159	12.41	17.0	
1155	6.34'				4.70	0.133	7.21	160	12.39	13.7	
1200	6.33'				4.61	0.133	7.20	160	12.42	13.0	
1205	—————→										GW Sample collected
											Purged ~ 2 gallons

1. Pump dial setting (for example: hertz, cycles/min., etc.)

2. 0.1 S/m = 1 mS/cm = 1,000 µS/cm = 1,000 µmhos/cm.

3. Oxidation reduction potential (stand in for Eh).

EPA parameter stabilization limits are noted; turbidity limit applies to values greater than 1 NTU.

\* Duplicate Metals sample collected from this well.

000013

000010

**TIGHE & BOND - WESTFIELD**  
**WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM**

Page 3 of 3

Static water level: 5.93' below concrete floor slab

Location (Site/Facility Name) <u>US Tsubaki Bennington, VT</u>	Top of screen (ft. below MP) _____
Well number <u>MW-2 (1B)</u>	Bottom of screen (ft. below MP) <u>9.38'</u>
Field personnel <u>JMP</u>	Pump intake (ft. below MP) <u>~7.5'</u>
Sampling organization <u>T+B</u>	Purging device (pump type) <u>Peristaltic pump</u>
Identify measuring pt. (MP) <u><del>Top concrete floor slab</del> Top concrete floor slab</u>	Water quality meter(s) <u>Fluorib+ Udd, Lohmeyer</u>

Clock Time (24 hr)	Water Depth (ft. below MP)	Pump Dial	Purge Rate (ml/min)	Cum. Volume Purged (liters)	Temp. (°C) 3%	Spec. Cond. <sup>2</sup> (mS/cm) 3%	pH ±0.1 unit	ORP/ Eh <sup>3</sup> (mV) ±10 mV	DO (mg/L) 10%	Turbidity (NTU) 10%	Comments
<del>1205</del>	<del>15.85</del>		<del>~75 ml/min</del>		<del>10.14</del>	<del>0.229</del>	<del>5.32</del>	<del>232</del>	<del>8.44</del>		
12:25	5.44'		150		4.90	0.091	7.26	158	11.37	24.8	
12:30	5.44'				4.89	0.090	7.22	160	10.28	18.1	
12:35	5.45'				4.85	0.091	7.20	162	10.17	18.4	
12:40	5.44'				4.45	0.087	7.05	173	11.93	12.9	
12:45	5.44'				4.46	0.087	7.07	172	11.98	10.60	
12:50	5.43'				4.37	0.087	7.02	175	11.83	10.65	
12:55	5.44'				4.35	0.087	7.00	175	12.27	5.14	
1300					4.32	0.087	6.99	176	12.39	2.89	
1305											GW sample collected Purged ~2.5 gal/lors

1. Pump dial setting (for example: hertz, cycles/min., etc.)
  2. 0.1 S/m = 1 mS/cm = 1,000 µS/cm = 1,000 µmhos/cm.
  3. Oxidation reduction potential (stand in for Eh).
- EPA parameter stabilization limits are noted; turbidity limit applies to values greater than 1 NTU.

000013

000011

10 B-360-3-69 (1160)  
 U.S. Tsubaki  
 8/3/05 222 Bowen Rd. Bennington VT  
 mi. hrs.

11:20 Jmp on-site  
 - review S.O.W.

11:25 Mark-out Digside locations  
 outside.  
 - Weather 40's, rain.  
 - painted pavement locations  
 (rainy + wet - may not stay)  
 - wooden stakes w/ white ribbon  
 on grassy areas.

11:45 Walked around site / bldg.  
 - identified headwall 15" culvert  
 - identified manhole cover in  
 landscape area, in front of bldg,  
 adjacent to Bowen St.

12:30 Jim Secor + Bennington DPH  
 on-site.  
 - DPH opens sewer  
 - Jim Secor: site walk, review  
 SOW, Per. Jim; VT DEC  
 ok'd sealing floor drains,  
 JBR to contact Jim Secor.

12:50 DPH, Jim Secor off-site.

33

US Tsubaki

~~LAWS 9-11-05~~

2/16/06 B-0360-5-69 (1160)

mi: 165

hrs 6:00 - 6:00 pm (12 hrs)

Weather - Sun, clear, 40's

5:10 Jmp on-site

8:30 Electrician on-site, open trans T-2  
 - badge states No PCB oil  
 - Jim Secor on-site; we review  
 the 3 storm drains to be closed  
 out/abandoned. Also tell him  
 coming from ~~the~~ so American  
 water won't come into pump.

- took photos of perimeter at site.

8:45 Open T-1; badge reads "contains  
less than 1 ppm PCB".- electrician closed both transformers  
after opening and replaced locks w/hex.

\* The black poly culvert outlet  
 where the trench drain out falls  
 @ the stream is discharging water,  
 yet nothing is currently entering the  
 trench drain. Other sources are  
 connected to the trench drain outfall.

9:30 Begin low flow on mw-3 (IB)

34

2/16/06 B-0360-5-69

- all low-flow data in GW book 18

pg 9-11

11:05 Begin low-flow on mw-1 (IB)

"Duplicate" metals sample collected  
 from mw-1 (IB)

1305 Collect low-flow GW sample from mw-2 (IB)

1330 Collected Composite soil sample  
 (from 4 locations) around T-1  
 for PCB analysis. Took photos  
 of sample locations. Collected  
 sample @ ~ 4"-5" deep.

1400 Collect Trench Drain sediment  
sample

1430 Collect SW-2 sample.

1445 Collect SW-1 sample.

1500 Collect SED-4 sample

1515 While collecting SED-3 sample  
 (downstream of Trench dr. outfall),  
 an obvious sheen would form  
 when scooping sediment from  
 stream bed, sediment had a  
 med. petroleum odor.

1530 Returned site soils from 2/9/06  
drilling to site

1600 Jmp off-site

11 B-360-3-69

2/3/05

- 1:00 Introduced red sewer dye tablets into and liberal amounts of water into floor drain
- 1:13 Sewer water in manway in front of building turns red, headwall culvert and unnamed stream remain clear and unchanged  
- floor drain is connected to municipal sewer
- 1:20 Waiting for sewer water to clear before dye testing other locations.  
- rain ended, begins to clear (intermittent)
- 1:35 Introduce green dye into trench drain. Drain fills w/ waste and does not empty. Sewer + unnamed stream remain clear w/ no sign of green dye.
- 2:30 Located and ID locations for Americlean to cover.  
The floor drain between the sump and the "floor drain" appears to be broken and plugged w/ solid debris, but not concrete

12

- 2:45 Noticed unnamed stream turned green at a black poly tube outfall close to ~~Bowen~~ Bowen St., trench drain found to empty to stream.
- 2:50 Introduce red dye to floor drain near eyewash station.
- 3:00 Sewer manway water turned red; floor drain near eyewash station is connected to municipal sewer.
- 3:15 Take photos of all drains and outfall for trench drain.  
- All floor drains + sump to be covered for cleaning, painted w/ white paint; "Americlean to cover"
- 3:45 Call Dig Safe; ID # 2006-050-5429  
Call Bennington DPH to mark water + sewer
- 3:50 Imp off site

16 B-360-3-69 (1160)  
 US Tsubaki  
 2/9/06 222 Bowen Rd. Burlington VT  
 Mi-163 hrs 13.25

8:30 JMP on-site  
 - Jim Secor on-site to  
 open bldg.  
 - TDS drilling (Tim)  
 on-site.

8:45 TDS off load truck mounted  
 Geo-Probe rig. 6610 RT

9:00 Review scope of work,  
 review HASP, review slab heating <sup>system</sup>  
 - begin B-1  
 - Per Jim Secor: slab rebar  
 heat is off/del-energized.

9:41 B-1 + B-2 completed

9:49 begin MW-1 (IB)

10:10 Calibreck PID -ok  
 (EP HE 309)



17 B 360-3-69 US Tsubaki

2/9/06

B-1 0'-5'

R 1'

PID 1347 6" of concrete floor,  
brn C-m sand and gvl, wet  
(mostly gvl)

5'-10'

R 1.5'

PID 583 brn gvl, some C-m S  
GW ~ 4' bsg. Wet  
10' EOB

B-2 0'-5'

R 2'

PID 459 brn blk F-m sand, some silt,  
some gvl. Dry

5'-10'

R 1.5'

PID 244 brn - C-m sand, some gvl.  
GW ~ 5' bsg. Wet  
10' EOB

18 B-360-3-69 US Tsubaki

2/9/06

MW-1 (1B)

0'-5'

R 2.5'

PID 559 brn F S, little gvl Dry

5'-10'

R 2.5'

PID 390 brn C gvl, some C S, tr fines  
GW ~ 5' bsg. Wet  
10' EOB

## Well Construction:

10'-2" 1" PVC screen, 10-slot

2'-0" 1" PVC riser

10'-1" Silica sand

~~1'-0.5' bentonite plug~~Flush mount hex key road box  
set in concrete

19

B-360

US Tsubaki

8/9/06

10:25

begin

MW-2 (1B)

10:45

set

MW-2 (1B)

PVC well

20

B-360

US Tsubaki

8/9/06

MW-2 (1B)

0'-5'

PID 273

R 1.5'

brn-grey m-s and gvl Dry

5'-10'

PID 110

R 1.75'

brn gvl and m-c s Wet

Gvl R 5'

10' EOB

Well Construction:

10'-2'

1" PVC

10-slot screen

2'-0'

1" PVC

riser

10'-0'

Silica filter sand.

Flush

mount and box set in

concrete.

d1

2/9/06

11.25 Begin MW-3 (1B)

d2

2/9/06

B-30'-5' PID 62.4 R 10"  
brn gvl, some C S Dry5'-10' PID 127 R 2'  
brn gvl and C-M S WET  
Gw ~ 4.5'-5' bsg  
10' EOBB-40'-5' PID 87.9 R 3.25'  
~~0'-1'~~ 0'-1' brn-grey Gvl and CS  
1'-3.25' brn- blk M-F S  
some C S, little gvl dry  
(organic peat layer?)5'-8' PID 50.2 R 2'  
~~0'-1'~~ 0'-1' Peat layer Wet  
1'-2' brn gvl and M-C S  
Refusal @ 8' bsg.  
8' EOB

23

2/9/06

11:48 Complete MW-3(1B)

12:10 - 12:40 Lunch break

12:40 begin B-6

24

2/9/06

MW-3(1B)

0'-5' PID 152 R 2'  
 brn m s, little F.S., tr gul  
 Tip of liner wet  
 5'-10' PID 84.7 R 2'  
 brn gul and C-m s Wet  
 10' EOB GW ~ 4.5' bsg

## Well Construction

10'-2' 1" PVC 10-slot screen  
 2'-0' 1" PVC riser  
 10'-1' Silica sand  
 Flush mount road box set  
 in concrete

B-5 0'-5' PID 37.4 R 3'  
 brn F-m sand Dry  
 5'-10' PID ~~449~~ 449 R 1.5'  
 brn C gul and C.S. Wet  
 10' EOB GW ~ 4.5' bsg  
 - mostly coarse gul, only  
 enough for small jar sample.

25

2/9/06

Could not open overhead door  
to access truck bsy for P-7  
-Moved B-7 to Eastern bsy.  
-B-7 location is ~ 3' below  
concrete pad of bldg, in  
truck bsy.

26

2/9/06

B-6

0'-5' PID 39.4 R 3'

0'-2' brn F-m S

2'-3' crushed concrete fill  
dry

5'-10' PID 39.8 R 2'

brn C-m S and gul. WET

Gw ~ 5-6' bsg

Refusal @ 8' bsg

8' EOB

B-7

0'-5' PID 23.8 R 2.5'

brn m S and gul WET

Gw ~ 1' bsg

5'-10' PID 18.3 R 2.0'

brn C gul some m-c S WET

Refusal @ 9'

9' EOB

27

2/9/06

1:05 Begin trench drain boring

1:40 Complete trench drain boring.

2:00 TDS Drilling/Tim off-site

- SMP Perform Densil on all boring samples
- Prep samples for lab analysis

5:15 Off-site

28

2/9/06

Trench	Drain	Boring		
0'-5'	PID	18.1	R 2.5'	
brn	tan	C gvl	and CS	wet

5'-10' PID 10.6 R 2'

Refused @ 7'

brn C gvl and C-MJ wet  
7' EOB



29

2/9/06

	Petro flag Results		PID Results	
	0'-5'	5'-10'	0'-5'	5'-10'
B-1	31	4	<del>1347</del>	<del>583</del>
B-2	3	17	459	244
B-3	E	31	62.4	127
B-4	219	328	87.9	50.2
B-5	1413	249	32.4	393
B-6	17	1639	39.4	29.8
B-7	13	0	23.8	18.3
Trench Dr. B.	20	9	18.1	10.6
MW-1 (1B)	10	0	559	390
MW-2 (1B)	1425	19	247	110
MW-3 (1B)	24	1	152	84.7

PF calibrated to response setting #5



March 8, 2006

Tighe & Bond, Inc.  
53 Southampton Road  
Westfield, MA 01085  
Attn: Ms. Jessica Roberts

RE: Analytical Reporting Limits--U.S. Tsubaki project

Dear Ms. Roberts,

The purpose of this letter is to address the reporting limits concerns for aqueous, soil and sediment samples analyzed in support of this project. The majority of the analytes that did not meet at least one of the Residential, Industrial or DAF 20 EPA Region 9 PRG criteria were semi-volatile organic compounds (SVOCs) analyzed by EPA Method 8270C. It should be noted that Alpha Woods Hole Labs utilized considerable effort to maximize the sensitivity of this analysis. The sample extracts were analyzed by Method 8270 in the full scan mode and then the sample extracts were re-analyzed in the Selected Ion Monitoring Mode (SIM) to achieve greater sensitivity for a subset of the compound list (primarily the polynuclear aromatic hydrocarbons).

The reason that the Region 9 PRG criteria was not achieved for these compounds is that the majority of them are noted as difficult analytes with inherent analytical performance issues or that the corresponding criteria is exceptionally low with a low probability of attainment. Often, both issues were valid for these eleven compounds. Three of the compounds that did not meet criteria are nitrosamines. These compounds are generally poor performers by Method 8270C. If they are considered contaminants of concern, an additional nitrosamine analysis using a modified Method 1625 may be an option for a future sampling round.

There were some volatile organic and metals target analytes that did not meet criteria as well. In general, this was due to a combination of issues concerning sample matrix and moisture content as well as the overall technical limitations of the methodology with respect to the Region 9 criteria. This is especially true for the marginal analytically performing analytes that are coupled with very low concentration regulatory criteria. Alpha Woods Hole Labs regrets any difficulties this issue may have caused you. Please feel free to call me at (508) 439-5177 if you have any questions or require any additional information.

Sincerely,

ALPHA WOODS HOLE LABS

*Douglas Sheeley*  
Douglas Sheeley  
Laboratory Director

TABLE 2B  
Groundwater Analytical Results  
Semi-VOCs  
U.S. Tsubaki, Bennington, Vermont

Sample ID	MW-1 (1B)	MW-2 (1B)	MW-3 (1B)	VT Primary Groundwater Quality	
Date Collected	2/16/2006	2/16/2006	2/16/2006	Standards (ppb)	
Collected By	JMP	JMP	JMP	ES	PAL
<b>Semi-Volatile Organic Compounds</b>					
<b>(Semi-VOCs) (µg/L)</b>					
Acephenanthrene	<4.8	<4.8	<5.0	—	—
Benidine	<48	<48	<50	—	—
1,2,4-Trichlorobenzene	<4.8	<4.8	<5.0	70.0	35.0
Hexachlorobenzene	<4.8	<4.8	<5.0	1.0	0.2
Bis(2-chloroethyl) ether	<4.8	<4.8	<5.0	—	—
1-Chloronaphthalene	<4.8	<4.8	<5.0	—	—
2-Chloronaphthalene	<5.8	<5.8	<6.0	—	—
1,2-Dichlorobenzene	<4.8	<4.8	<5.0	600.0	300.0
1,3-Dichlorobenzene	<4.8	<4.8	<5.0	600.0	300.0
1,4-Dichlorobenzene	<4.8	<4.8	<5.0	75.0	37.5
3,3'-Dichlorobenzidine	<48	<48	<50	—	—
2,4-Dinitrotoluene	<5.8	<5.8	<6.0	—	—
2,6-Dinitrotoluene	<4.8	<4.8	<5.0	—	—
Azobenzene	<4.8	<4.8	<5.0	—	—
Fluoranthene	<4.8	<4.8	<5.0	280.0	140.0
4-Chlorophenyl phenyl ether	<4.8	<4.8	<5.0	—	—
4-Bromophenyl phenyl ether	<4.8	<4.8	<5.0	—	—
Bis(2-chloroisopropyl) ether	<4.8	<4.8	<5.0	300.0	150.0
Bis(2-chloroisopropyl) methane	<4.8	<4.8	<5.0	—	—
Hexachlorobutadiene	<0.7	<0.6	<1.0	1.0	0.5
Hexachlorocyclopentadiene	<0.7	<0.6	<1.0	50.0	25.0
Hexachloroethane	<4.8	<4.8	<5.0	—	—
Isophorone	<4.8	<4.8	<5.0	100.0	50.0
Naphthalene	<4.8	<4.8	<5.0	20.0	10.0
Nitrobenzene	<4.8	<4.8	<5.0	—	—
NDPA/DPA	<14	<14	<15	—	—
n-Nitrosod-n-propylamine	<4.8	<4.8	<5.0	—	—
Bis(2-ethylhexyl)phthalate	<0.7	<0.6	<1.0	—	—
Butyl benzyl phthalate	<4.8	<4.8	<5.0	—	—
Di-n-butylphthalate	<4.8	<4.8	<5.0	—	—
Di-n-octylphthalate	<4.8	<4.8	<5.0	—	—
Diethyl phthalate	<4.8	<4.8	<5.0	—	—
Dimethyl phthalate	<4.8	<4.8	<5.0	—	—
Benzo(a)anthracene	<4.8	<4.8	<5.0	—	—
Benzo(a)pyrene	<4.8	<4.8	<5.0	0.2	0.1
Benzo(b)fluoranthene	<4.8	<4.8	<5.0	—	—
Benzo(k)fluoranthene	<4.8	<4.8	<5.0	—	—
Chrysene	<4.8	<4.8	<5.0	—	—
Acephenanthylene	<4.8	<4.8	<5.0	—	—
Anthracene	<4.8	<4.8	<5.0	2100.0	1050.0
Benzo(ghi)perylene	<4.8	<4.8	<5.0	—	—
Fluorene	<4.8	<4.8	<5.0	280.0	140.0
Phenanthrene	<4.8	<4.8	<5.0	—	—
Dibenzo(a,h)anthracene	<4.8	<4.8	<5.0	—	—
Indeno (1,2,3-cd) pyrene	<0.8	<0.7	<1.0	—	—
Pyrene	<4.8	<4.8	<5.0	—	—
Benzo(e)pyrene	<4.8	<4.8	<5.0	—	—
Biphenyl	<4.8	<4.8	<5.0	—	—
Perylene	<4.8	<4.8	<5.0	—	—
Aniline	<0.7	<0.6	<1.0	—	—
4-Chloroaniline	<4.8	<4.8	<5.0	—	—
1-Methylnaphthalene	<4.8	<4.8	<5.0	—	—
2-Nitroaniline	<4.8	<4.8	<5.0	—	—
3-Nitroaniline	<4.8	<4.8	<5.0	—	—
4-Nitroaniline	<0.8	<0.7	<1.0	—	—
Dibenzofuran	<4.8	<4.8	<5.0	—	—
a,a-Dimethylphenethylamine	<48	<48	<50	—	—
Hexachloropropene	<0.7	<0.6	<1.0	—	—
Nitrosod-n-butylamine	<0.7	<0.6	<1.0	—	—
2-Methylnaphthalene	<4.8	<4.8	<5.0	—	—
1,2,4,5-Tetrachlorobenzene	<19	<19	<20	—	—
Pentachlorobenzene	<19	<19	<20	—	—
a-Naphthylamine	<19	<19	<20	—	—
b-Naphthylamine	<19	<19	<20	—	—
Phenacetin	<0.7	<0.6	<1.0	—	—
Dimethoate	<19	<19	<20	—	—
4-Aminophenyl	<0.7	<0.6	<1.0	—	—
Pentachloronitrobenzene	<0.7	<0.6	<1.0	6.0	3.0
Isodrin	<0.7	<0.6	<1.0	—	—
p-Dimethylaminoazobenzene	<0.7	<0.6	<1.0	—	—
Chlorobenzilate	<19	<19	<20	—	—
3-Methylcholanthrene	<19	<19	<20	—	—
Ethyl methanesulfonate	<14	<14	<15	—	—
Acetophenone	<19	<19	<20	—	—
Nitrosodipiperidine	<19	<19	<20	—	—
7,12-Dimethylbenzo(a)anthracene	<0.7	<0.6	<1.0	—	—
n-Nitrosodimethylamine	<48	<48	<50	—	—
2,4,6-Trichlorophenol	<4.8	<4.8	<5.0	—	—
p-Chloro-m-cresol	<4.8	<4.8	<5.0	—	—
2-Chlorophenol	<5.8	<5.8	<6.0	—	—
2,4-Dichlorophenol	<0.7	<0.6	<1.0	—	—
2,4-Dimethylphenol	<0.7	<0.6	<1.0	—	—
2-Nitrophenol	<19	<19	<20	—	—
4-Nitrophenol	<0.7	<0.6	<1.0	—	—
2,4-Dinitrophenol	<19	<19	<20	—	—
4,6-Dinitro-o-cresol	<19	<19	<20	—	—
Pentachlorophenol	<19	<19	<20	1.0	0.3
Phenol	<0.8	<0.7	<1.0	2100.0	210.0
2-Methylphenol	<5.8	<5.8	<6.0	—	—
3-Methylphenol/4-Methylphenol	<5.8	<5.8	<6.0	—	—
2,4,5-Trichlorophenol	<4.8	<4.8	<5.0	—	—
2,6-Dichlorophenol	<0.7	<0.6	<1.0	—	—
Benzoic Acid	<48	<48	<50	—	—
Benzyl Alcohol	<0.7	<0.6	<1.0	—	—
Carbazole	<4.8	<4.8	<5.0	—	—
Pyridine	<48	<48	<50	—	—
2-Picoline	<19	<19	<20	—	—
Pronamide	<19	<19	<20	50.0	25.0
Methyl methanesulfonate	<19	<19	<20	—	—

\* = Indicates contaminants of special concern to the Department of Environmental Conservation and the Department of Health. Contact the Department of Environmental Conservation if these contaminants are found in a drinking water source for additional information concerning resampling and risk notification.

— = Indicates that a regulatory standard has not been established for that compound.

\*\* Secondary Groundwater Quality Standard

**Bold italicized** text indicates that the laboratory method detection limit exceeds the applicable Enforcement Standard.

*italicized* text indicates that the laboratory method detection limit exceeds the applicable PAL.

Note: GWW3 is referred to as MW-3 in laboratory analytical report included in Appendix G.

TABLE 2A  
Groundwater Analytical Results  
VOCs Total Metals  
U.S. Tsubaki, Bennington, Vermont

Sample ID	MW-1 (1B)	MW-2 (1B)	MW-3 (1B)	Duplicate	VT Primary Groundwater Quality Standards	
Date Collected	2/16/2006	2/16/2006	2/16/2006	2/16/2006	ES	PAL
Collected By	JMP	JMP	JMP	JMP		
<b>Total Metals (µg/L)</b>						
Antimony, Total	<0.5	<0.5	<0.5	<0.5	8.0	3.0
Arsenic, Total	<0.5	<0.5	<0.5	<0.5	10	1
Barium, Total	NA	NA	NA	NA	2000	1000
Beryllium, Total	<0.5	<0.5	<0.5	<0.5	4.0	1.0
Cadmium, Total	<0.5	<0.5	<0.5	<0.5	5	2.5
Chromium, Total	1.1	<0.5	0.9	1.1	100	50
Copper, Total	1.2	<0.5	1.0	1.5	1300.00	650.0
Lead, Total	0.7	<0.5	<0.5	0.9	15	1.5
Mercury, Total	<0.2	<0.2	<0.2	<0.2	2	0.5
Nickel, Total	0.7	<0.5	<0.5	0.7	100.0	50.0
Selenium, Total	<1.0	<1.0	<1.0	<1.0	50	25
Silver, Total **	<0.5	<0.5	<0.5	<0.5	0.1	0.05
Thallium, Total	<0.5	<0.5	<0.5	<0.5	2.0	1.0
Zinc, Total**	6.4	7.9	6.8	7.9	5.0	2.5
<b>Volatile Organic Compounds (VOCs) (µg/L)</b>						
1,1,1,2-Tetrachloroethane	<0.50	<0.50	<0.50	NA	70.0	35.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	NA	200.0	100.0
1,1,2,2-Tetrachloroethane	<0.50	<0.50	<0.50	NA	—	—
1,1,2-Trichloroethane	<0.75	<0.75	<0.75	NA	5.0	2.5
1,1 Dichloroethane	<0.75	<0.75	<0.75	NA	70.0	35.0
1,1 Dichloroethene	<0.50	<0.50	<0.50	NA	7.0	0.7
1,1-Dichloropropene	<2.5	<2.5	<2.5	NA	—	—
1,2,3-Trichlorobenzene	<2.5	<2.5	<2.5	NA	—	—
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	NA	5.0	0.5
1,2,4-Trichlorobenzene	<2.5	<2.5	<2.5	NA	70.0	35.0
1,2,4-Trimethylbenzene	<2.5	<2.5	<2.5	NA	5.0	2.5
1,2-Dibromo-3-chloropropane	<2.5	<2.5	<2.5	NA	—	—
1,2-Dibromoethane	<2.0	<2.0	<2.0	NA	—	—
1,2-Dichlorobenzene	<2.5	<2.5	<2.5	NA	—	—
1,2 Dichloroethane	<0.50	<0.50	<0.50	NA	5.0	0.5
1,2-Dichloropropane	<1.8	<1.8	<1.8	NA	5.0	0.5
1,3,5-Trimethylbenzene	<2.5	<2.5	<2.5	NA	4.0	2.0
1,3-Dichlorobenzene	<2.5	<2.5	<2.5	NA	—	—
1,3-Dichloropropane	<2.5	<2.5	<2.5	NA	0.5	0.5
1,4-Dichlorobenzene	<2.5	<2.5	<2.5	NA	—	—
2,2-Dichloropropane	<2.5	<2.5	<2.5	NA	—	—
2-Butanone (MEK)	<5.0	<5.0	<5.0	NA	4200.0	2100.0
2-Hexanone	<5.0	<5.0	<5.0	NA	—	—
4-Methyl-2-pentanone (MIBK)	<5.0	<5.0	<5.0	NA	—	—
Acetone	<5.0	<5.0	<5.0	NA	700.0	350.0
Acrolein	<12	<12	<12	NA	—	—
Acrylonitrile	<5.0	<5.0	<5.0	NA	—	—
Benzene*	<0.50	<0.50	<0.50	NA	5.0	0.5
Bromobenzene	<2.5	<2.5	<2.5	NA	—	—
Bromochloromethane	<2.5	<2.5	<2.5	NA	90.0	9.0
Bromodichloromethane	<0.50	<0.50	<0.50	NA	—	—
Bromoform	<2.0	<2.0	<2.0	NA	—	—
Bromomethane	<1.0	<1.0	<1.0	NA	10.0	1.0
Carbon disulfide	<5.0	<5.0	<5.0	NA	—	—
Carbon tetrachloride*	<0.50	<0.50	<0.50	NA	5.0	0.5
Chlorobenzene	<0.50	<0.50	<0.50	NA	100.0	50.0
Chloroethane	<1.0	<1.0	<1.0	NA	—	—
Chloroform	<0.75	<0.75	<0.75	NA	—	—
Chloromethane	<2.5	<2.5	<2.5	NA	30.0	15.0
Dibromochloromethane	<0.50	<0.50	<0.50	NA	—	—
Dibromomethane	<5.0	<5.0	<5.0	NA	—	—
Dichlorodifluoromethane	<5.0	<5.0	<5.0	NA	1000.0	500.0
1,4-Dichlorobutane	<5.0	<5.0	<5.0	NA	—	—
Ethylbenzene	<0.50	<0.50	<0.50	NA	700.0	350.0
Ethyl ether	<2.5	<2.5	<2.5	NA	—	—
Ethyl methacrylate	<5.0	<5.0	<5.0	NA	—	—
Hexachlorobutadiene	<0.60	<0.60	<0.60	NA	1.0	0.5
Iodomethane	<5.0	<5.0	<5.0	NA	—	—
Isopropylbenzene	<0.5	<0.5	<0.50	NA	—	—
Methyl-tert-butyl-ether (MTBE)	<1.0	<1.0	<1.0	NA	40.0	20.0
Methylene chloride	<5.0	<5.0	<5.0	NA	5.0	0.5
Naphthalene	<2.5	<2.5	<2.5	NA	20.0	10.0
Styrene	<1.0	<1.0	<1.0	NA	100.0	50.0
Tetrachloroethene*	<0.5	<0.5	<0.50	NA	5.0	0.5
Tetrahydrofuran	<10	<10	<10	NA	—	—
Toluene	<0.75	<0.75	<0.75	NA	1000.0	500.0
Trichloroethene (TCE)*	<0.50	<0.50	<0.50	NA	5.0	0.5
Trichlorofluoromethane	<2.5	<2.5	<2.5	NA	2100.0	1050.0
Vinyl chloride*	<1.0	<1.0	<1.0	NA	2.0	0.5
cis-1,3-Dichloropropene	<0.50	<0.50	<0.50	NA	—	—
trans-1,3-Dichloropropene	<0.50	<0.50	<0.50	NA	—	—
cis-1,2 Dichloroethene	<0.50	<0.50	<0.50	NA	70.0	35.0
trans-1,2-Dichloroethene	<0.75	<0.75	<0.75	NA	100.0	50.0
trans-1,4-Dichloro-2-butene	<2.5	<2.5	<2.5	NA	—	—
m&P-Xylenes	<1.0	<1.0	<1.0	NA	10000.0	5000.0
o-Chlorotoluene	<2.5	<2.5	<2.5	NA	—	—
o-Xylene	<1.0	<1.0	<1.0	NA	10000.0	5000.0
n-Butylbenzene	<0.50	<0.50	<0.50	NA	—	—
n-Propylbenzene	<0.50	<0.50	<0.50	NA	—	—
p-Chlorotoluene	<2.5	<2.5	<2.5	NA	—	—
p-Isopropyltoluene	<0.5	<0.50	<0.50	NA	—	—
sec-Butylbenzene	<0.5	<0.50	<0.50	NA	—	—
tert-Butylbenzene	<2.5	<2.5	<2.5	NA	—	—

\* = Indicates contaminants of special concern to the Department of Environmental Conservation and the Department of Health. Contact the Department of Environmental Conservation if these contaminants are found in a drinking water source for additional information concerning resampling and risk notification.

— = Indicates that a regulatory standard has not been established for that compound.

\*\* Secondary Groundwater Quality Standard

**Italicized** text indicates that the laboratory method detection limit exceeds the applicable Enforcement Standard.

**Italicized** text indicates that the laboratory method detection limit exceeds the applicable PAL.

**TABLE 1A**  
Soil Analytical Results  
VOCs, Total Metals and PCBs  
U.S. Tsubaki, Bennington, Vermont

Sample ID	B-1	B-1 (1B)	B-1	B-4	MW-1 (1B)	B-3	B-8	MW-2 (1B)	B-5	B-4	T-1	EPA Region 9 PROs		
Sample Depth	0-4'	0-4'	0-1'	0-1'	6-10'	6-10'	6-10'	6-10'	0-4'	0-4'	Composite	Residential	Industrial	DAF 20'
Date Collected	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/8/2006	2/18/2006			
Collected By	JMP	JMP	JMP	JMP	JMP	JMP	JMP	JMP	JMP	JMP	JMP			
Volatile Organic Compounds (µg/kg)														
1,1,1,2-Tetrachloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	3,200	7,900	2,000
1,1,1-Trichloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	1,200,000	1,300,000	2,000
1,1,2,2-Tetrachloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	410	930	3
1,1,2-Trichloroethane	<1.4	<1.4	<1.5	<1.6	<1.3	NA	NA	NA	NA	NA	NA	730	1,600	20
1,1-Dichloroethane	<1.4	<1.4	<1.5	<1.6	<1.3	NA	NA	NA	NA	NA	NA	510,000	1,700,000	23,000
1,2-Dichloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	120,000	410,000	60
1-Chloroethane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
1,2,3-Trichlorobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
1,2,3-Trichloropropane	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	34	76	—
1,2,4-Trichlorobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	62,000	220,000	5,000
1,2,4-Trimethylbenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
1,2-Dichloro-3-chloropropane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
1,2-Dibromomethane	<3.7	<3.8	<4.1	<4.2	<3.4	NA	NA	NA	NA	NA	NA	32	76	—
1,2-Dichlorobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	600,000	600,000	17,000
1,2-Dichloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	28	600	20
trans-1,2-Dichloroethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	—	—	—
trans-1,2-Dichloroethane	<1.4	<1.4	<1.5	<1.6	<1.3	NA	NA	NA	NA	NA	NA	—	—	—
2,2-Dichloropropane	<3.2	<3.3	<3.6	<3.6	<3.0	NA	NA	NA	NA	NA	NA	—	—	—
1,3,5-Trimethylbenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	21,000	740	30
1,3-Dichlorobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	530,000	600,000	—
1,3-Dichloropropane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	100	100,000	360,000
cis-1,3-Dichloropropane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	—	—	—
trans-1,3-Dichloropropane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	—	—	—
1,4-Dichlorobutane	<9.3	<9.6	<10.0	<10.0	<8.5	NA	NA	NA	NA	NA	NA	—	—	—
1,4-Dichlorobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	3,400	7,900	2,000
trans-1,4-Dichloro-2-butene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	18.0	18.0	—
2,2-Dichloropropane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
2-Butanone (MEK)	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	22,000,000	110,000,000	—
2-Hexanone	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	—	—	—
4-Methyl-2-pentanone	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	—	—	—
Acetone	<27	<28	<30	<30	<25	NA	NA	NA	NA	NA	NA	14,000,000	54,000,000	16,000
Acetone	<43	<44	<46	<46	<38	NA	NA	NA	NA	NA	NA	100	340	—
Acrylonitrile	<9.3	<9.6	<10.0	<10.0	<8.5	NA	NA	NA	NA	NA	NA	210	490	—
Benzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	640	1400	30
Bromobenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	28,000	92,000	—
Bromochloromethane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
Bromodichloromethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	820	18,000	—
Bromomethane	<3.7	<3.8	<4.1	<4.2	<3.4	NA	NA	NA	NA	NA	NA	62,000	220,000	800
n-Butylbenzene	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	3,900	13,000	200
n-Butylbenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	240,000	240,000	—
n-Butylbenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	220	220	—
tert-Butylbenzene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	390,000	390,000	—
Carbon disulfide	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	360,000	720,000	32,000
Carbon tetrachloride	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	250	550	70
Chlorobenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	19,000	530,000	1000
Chlorobenzene	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	3,900	6,500	—
Chloroform	<1.4	<1.4	<1.5	<1.6	<1.3	NA	NA	NA	NA	NA	NA	22,000	47,000	600
Chloromethane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	47,000	160,000	—
o-Chlorotoluene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	160,000	560,000	—
p-Chlorotoluene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	—	—	—
Bromodichloromethane	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	1100	2600	400
Dibromomethane	<9.3	<9.6	<10.0	<10.0	<8.5	NA	NA	NA	NA	NA	NA	—	—	—
Dichlorodifluoromethane	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	94,000	310,000	—
Ethylbenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	400,000	400,000	13,000
Ethyl ether	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	1,600,000	1,600,000	—
Hexyl methacrylate	<3.7	<3.8	<4.1	<4.2	<3.4	NA	NA	NA	NA	NA	NA	140,000	140,000	—
Hexyl methacrylate	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	6200	22000	2000
Iodomethane	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	—	—	—
Isopropylbenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	—	—	—
p-Isopropyltoluene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	—	—	—
Methyl t-butyl ether (MTBE)	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	32,000	70,000	—
Methylene chloride	<9.3	<9.6	<10	<10	<8.5	NA	NA	NA	NA	NA	NA	9,100	21,000	20
Naphthalene	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	56,000	190,000	84,000
n-Propylbenzene	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	240,000	240,000	—
Styrene	<1.9	<1.9	<2	<2.1	<1.7	NA	NA	NA	NA	NA	NA	1700000	1700000	4000
Tetrachloroethane (PCE)	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	460	1300	60
Tetrahydrofuran	<19	<19	<20	<21	<17	NA	NA	NA	NA	NA	NA	9400	21000	—
Toluene	<1.4	<1.4	<1.5	<1.6	<1.3	NA	NA	NA	NA	NA	NA	520,000	520,000	12,000
Trichloroethene (TCE)	<0.93	<0.96	<1.0	<1.0	<0.85	NA	NA	NA	NA	NA	NA	53	110	60
Trichlorofluoromethane	<4.6	<4.6	<5.1	<5.2	<4.3	NA	NA	NA	NA	NA	NA	390,000	2,000,000	—
Vinyl acetate	<3.7	<3.8	<4.1	<4.2	<3.4	NA	NA	NA	NA	NA	NA	4300	14,000	170,000
Vinyl chloride	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	79,000	750	10
m,p-Xylenes	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	270,000	420,000	210,000
o-Xylene	<1.9	<1.9	<2.0	<2.1	<1.7	NA	NA	NA	NA	NA	NA	270,000	420,000	210,000
Total Metals (mg/kg)														
Antimony, Total	NA	NA	NA	NA	NA	<2.1	<2.2	<2.3	<2.1	<2.1	NA	31	410	5
Arsenic, Total	NA	NA	NA	NA	NA	2.8	1.4	2.4	2.8	1.20	NA	0.39	1.6	29
Beryllium, Total	NA	NA	NA	NA	NA	<0.21	<0.22	<0.23	<0.21	<0.21	NA	150	1,900	63
Cadmium, Total	NA	NA	NA	NA	NA	<0.42	<0.43	<0.44	<0.42	<0.42	NA	37	450	8
Chromium, Total	NA	NA	NA	NA	NA	6.3	6.0	6.0	2.8	9.8	NA	450	450	—
Copper, Total	NA	NA	NA	NA	NA	<4.0	2.4	5.2	6.7	3.7	NA	3100	41,000	—
Lead, Total	NA	NA	NA	NA	NA	3.0	2.4	11.0	3.6	4.1	NA	400	800	—
Mercury, Total	NA	NA	NA	NA	NA	<0.08	<0.09	<0.09	<0.08	<0.09	NA	23	310	—
Nickel, Total	NA	NA	NA	NA	NA	3.8	2.9	5.0	4.4	3.2	NA	1900	62,000	—
Selenium, Total	NA	NA	NA	NA	NA	<0.83	<0.82	<0.82	<0.82	<0.82	NA	390	5,100	50
Silver, Total	NA	NA	NA	NA	NA	<0.42	<0.43	<0.46	<0.42	<0.42	NA	1600	51,000	34
Thallium, Total	NA	NA	NA	NA	NA	<0.42	<0.43	<0.46	<0.42	<0.42	NA	5.2	67	—
Zinc, Total	NA	NA	NA	NA	NA	11	11	33	15	18	NA	23,000	100,000	12,000
Polychlorinated Biphenyls (PCBs) (µg/kg)														
All Anomers	NA	NA	NA	NA	NA	<174	NA	NA	NA	NA	<39.7	3,900	21,000	—

(1) VT DEC does not maintain compound-specific soil cleanup standards. As such, DEC requests that soil analytical results be compared by EPA Region 9 Preliminary Remedial Goals (PRGs) for Industrial and Residential Soil. PRGs are risk-based concentrations.

(1) DAF 32: Generic soil screening levels for migration to groundwater pathways developed using a dilution factor of 20  $\mu\text{g/kg}$  - milligrams per kilogram  
NA = indicates that the sample was not analyzed by that method.  
— = indicates that a standard has not been published for that compound.  
ND = indicates that the concentration detected is not detected at a concentration above the laboratory method detection limit.  
Bold text indicates that the concentration detected exceeds the applicable PRG for residential properties  
Bold Italicized text indicates that the concentration detected exceeds the applicable PRG for residential and industrial properties  
ND = Not sampled



TABLE 1B  
Soil Analytical Results  
Semi-VOCs PAHs  
U.S. Tsubaki, Bennington, Vermont

Sample ID	B-1	MW-1 (18)	B-1	S-5	MW-1 (18)	EPA Region 9 PRGs <sup>1</sup>		
Sample Depth	0-5"	0-5"	5-10"	5-10"	5-10"			
Boring Location								
Location on Site								
Date Collected	2/9/2006	2/9/2006	2/9/2006	2/9/2006	2/9/2006	Residential	Industrial	DAF 20 <sup>2</sup>
Collected By	JMP	JMP	JMP	JMP	JMP			
<b>Semi Volatile Organic Compounds (µg/kg)</b>								
Arenaphene	<370	<350	<400	<400	<370	3,700,000	28,000,000	570,000
Benzidine	<370	<350	<400	<400	<370	2.1	7.5	—
1,2,4-Trichlorobenzene	<370	<350	<400	<400	<370	62,000	220,000	500
Heptachlorobenzene	<370	<350	<400	<400	<370	300	1,100	200
Bis(2-chloroethyl) ether	<370	<350	<400	<400	<370	220	580	0.4
1-Chloronaphthalene	<370	<350	<400	<400	<370	—	—	—
2-Chloronaphthalene	<440	<420	<480	<480	<440	—	—	—
1,2-Dichlorobenzene	<370	<350	<400	<400	<370	600,000	600,000	17,000
1,3-Dichlorobenzene	<370	<350	<400	<400	<370	530,000	800,000	—
1,4-Dichlorobenzene	<370	<350	<400	<400	<370	3400	7900	200
1,3-Dichlorobenzidine	<730	<700	<790	<790	<740	1100	3500	7
2,4-Dibromobenzene	<370	<350	<400	<400	<370	720	2500	0.8
2,6-Dibromobenzene	<370	<350	<400	<400	<370	720	2500	0.8
Azobenzene	<370	<350	<400	<400	<370	4400	16,000	—
Fluoranthene	<370	<350	<400	<400	<370	2,300,000	22,000,000	4,300,000
4-Chlorophenyl phenyl ether	<370	<350	<400	<400	<370	—	—	—
4-Bromophenyl phenyl ether	<370	<350	<400	<400	<370	—	—	—
Bis(2-chloroethyl) ether	<370	<350	<400	<400	<370	2900	7400	—
Bis(2-chloroethyl) methane	<370	<350	<400	<400	<370	—	—	—
Heptachlorobenzene	<730	<700	<790	<790	<740	6000	22,000	2000
Heptachlorocyclopentadiene	<730	<700	<790	<790	<740	370,000	3,700,000	400,000
Heptachlorocyclopentadiene	<370	<350	<400	<400	<370	35000	120,000	500
Isophthalene	<370	<350	<400	<400	<370	510,000	510,000	500
Naphthalene	<370	<350	<400	<400	<370	550000	190,000	84,000
Nitrobenzene	<370	<350	<400	<400	<370	20,000	100,000	100
NCPADPA	<1100	<1000	<1200	<1200	<1100	—	—	—
n-Nitrosodimethylamine	<370	<350	<400	<400	<370	69	250	.05
Bis(2-ethylhexyl)phthalate	<730	<700	<790	<790	<740	95,000	120,000	—
Butyl benzyl phthalate	<370	<350	<400	<400	<370	12,000,000	10,000,000	—
Di-n-butylphthalate	<370	<350	<400	<400	<370	—	—	—
Di-n-octylphthalate	<370	<350	<400	<400	<370	2,400,000	25,000,000	10,000,000
Diethyl phthalate	<370	<350	<400	<400	<370	40,000,000	100,000,000	—
Dimethyl phthalate	<370	<350	<400	<400	<370	100,000,000	100,000,000	—
Benzofluoranthene	<370	<350	<400	<400	<370	62,000	2100	2000
Benzofluoranthene	<370	<350	<400	<400	<370	6.2	210	800
Benzofluoranthene	<370	<350	<400	<400	<370	620	2100	500
Benzofluoranthene	<370	<350	<400	<400	<370	6200	21000	48000
Chrysene	<370	<350	<400	<400	<370	62000	210000	180000
Arenaphthalene	<370	<350	<400	<400	<370	—	—	—
Anthracene	<370	<350	<400	<400	<370	22,000,000	100,000,000	12,000,000
Benzofluoranthene	<370	<350	<400	<400	<370	—	—	—
Fluorene	<370	<350	<400	<400	<370	2,700,000	28,000,000	560,000
Phenanthrene	<370	<350	<400	<400	<370	—	—	—
Dibenzofluoranthene	<370	<350	<400	<400	<370	62	210	2,000
Indeno(1,2,3-cd)pyrene	<370	<350	<400	<400	<370	620	2100	14,000
Pyrene	<370	<350	<400	<400	<370	2,300,000	290,000,000	4,200,000
Benzofluoranthene	<370	<350	<400	<400	<370	—	—	—
Biphenyl	<370	<350	<400	<400	<370	3,000,000	28,000,000	—
Perylene	<370	<350	<400	<400	<370	—	—	—
Anthracene	<370	<350	<400	<400	<370	85,000	300,000	—
4-Chloroanthracene	<370	<350	<400	<400	<370	2,400,000	2,500,000	700
1-Methylanthracene	<370	<350	<400	<400	<370	—	—	—
2-Nitroanthracene	<370	<350	<400	<400	<370	180,000	1,800,000	—
3-Nitroanthracene	<370	<350	<400	<400	<370	18,000	82,000	—
4-Nitroanthracene	<370	<350	<400	<400	<370	23,000	82,000	—
Dibenzofuran	<370	<350	<400	<400	<370	150,000	1,600,000	—
a,a-Dimethylphenanthrene	<370	<350	<400	<400	<370	61,000	820,000	—
Heptachlorobenzene	<730	<700	<790	<790	<740	—	—	—
Nitrosodimethylamine	<370	<350	<400	<400	<370	24	58	—
2-Methylanthracene	<370	<350	<400	<400	<370	—	—	—
1,2,4,5-Tetrachlorobenzene	<1500	<1400	<1600	<1600	<1500	18,000	180,000	—
Perfluorobenzene	<1500	<1400	<1600	<1600	<1500	49,000	480,000	—
a-Naphthylamine	<1500	<1400	<1600	<1600	<1500	—	—	—
b-Naphthylamine	<1500	<1400	<1600	<1600	<1500	—	—	—
Phenanthrene	<370	<350	<400	<400	<370	—	—	—
Dimethylol	<1500	<1400	<1600	<1600	<1500	12,000	120,000	—
4-Aminobiphenyl	<730	<700	<790	<790	<740	—	—	—
Perfluorobenzene	<730	<700	<790	<790	<740	1900	6600	—
Isodrin	<730	<700	<790	<790	<740	—	—	—
p-Dimethylaminobenzene	<730	<700	<790	<790	<740	—	—	—
Chlorobenzene	<1500	<1400	<1600	<1600	<1500	1,800	6,400	—
3-Methylanthracene	<1500	<1400	<1600	<1600	<1500	—	—	—
Ethyl methanesulfonate	<1100	<1000	<1200	<1200	<1100	—	—	—
Azobenzene	<1500	<1400	<1600	<1600	<1500	—	—	—
Nitrosodimethylamine	<1500	<1400	<1600	<1600	<1500	—	—	—
1,12-Dichlorobenzene	<730	<700	<790	<790	<740	—	—	—
n-Nitrosodimethylamine	<370	<350	<400	<400	<370	9.5	34	—
2,4,6-Trichlorophenol	<370	<350	<400	<400	<370	6100	62000	200
p-Chlorophenol	<370	<350	<400	<400	<370	63,000	240,000	4,000
2-Chlorophenol	<440	<420	<480	<480	<440	180,000	1,800,000	1,000
2,4-Dichlorophenol	<370	<350	<400	<400	<370	1,200,000	12,000,000	9,000
2-Nitrophenol	<1500	<1400	<1600	<1600	<1500	—	—	—
4-Nitrophenol	<730	<700	<790	<790	<740	—	—	—
2,4-Dinitrophenol	<1500	<1400	<1600	<1600	<1500	120,000	1,200,000	300
4,6-Dinitro-2-cresol	<1500	<1400	<1600	<1600	<1500	—	—	—
Perfluorobenzene	<1500	<1400	<1600	<1600	<1500	3,000	9,000	30
Phenol	<510	<480	<560	<560	<520	18,000,000	100,000,000	100,000
2-Methylphenol	<440	<420	<480	<480	<440	3,100,000	31,000,000	15,000
3-Methylphenol	<440	<420	<480	<480	<440	310,000	3,100,000	—
2,4,6-Trichlorophenol	<440	<420	<480	<480	<440	6,100,000	62,000,000	270,000
2,6-Dichlorophenol	<730	<700	<790	<790	<740	—	—	—
Benzic Acid	<370	<350	<400	<400	<370	100,000,000	100,000,000	400,000
Benzyl Alcohol	<730	<700	<790	<790	<740	18,000,000	180,000,000	—
Carbazole	<370	<350	<400	<400	<370	24000	86,000	800
Pyridine	<370	<350	<400	<400	<370	61,000	620,000	—
2-Picoline	<1500	<1400	<1600	<1600	<1500	—	—	—
Propionamide	<1500	<1400	<1600	<1600	<1500	4,600,000	46,000,000	—
Methyl methanesulfonate	<1500	<1400	<1600	<1600	<1500	—	—	—
<b>Polyaromatic Hydrocarbons (PAHs) (µg/kg)</b>								
Arenaphene	<15	<14	<16	<16	<15	3,700,000	28,000,000	570,000
2-Chloronaphthalene	<15	<14	<16	<16	<15	—	—	—
Fluoranthene	<15	<14	<16	<16	<15	2,300,000	22,000,000	4,300,000
Heptachlorobenzene	<37	<35	<40	<40	<37	6,200	22,000	2,000
Naphthalene	<15	<14	<16	<16	<15	56,000	190,000	84,000
Benzofluoranthene	<15	<14	<16	<16	<15	62,000	2100	2000
Benzofluoranthene	<15	<14	<16	<16	<15	6.2	210	800
Benzofluoranthene	<15	<14	<16	<16	<15	620	2100	500
Benzofluoranthene	<15	<14	<16	<16	<15	6200	21000	48000
Chrysene	<15	<14	<16	<16	<15	62000	210000	180000
Arenaphthalene	<15	<14	<16	<16	<15	—	—	—
Anthracene	<15	<14	<16	<16	<15	22,000,000	100,000,000	12,000,000
Benzofluoranthene	<15	<14	<16	<16	<15	—	—	—
Fluorene	<15	<14	<16	<16	<15	2,700,000	28,000,000	560,000
Phenanthrene	<15	<14	<16	<16	<15	—	—	—
Dibenzofluoranthene	<15	<14	<16	<16	<15	62	210	2,000
Indeno(1,2,3-cd)pyrene	<15	<14	<16	<16	<15	620	2100	14,000
Pyrene	<15	<14	<16	<16	<15	2,300,000	290,000,000	4,200,000
1-Methylanthracene	<15	<14	<16	<16	<15	—	—	—
2-Methylanthracene	<15	<14	<16	<16	<15	—	—	—
Perfluorobenzene	<59	<56	<63	<63	<59	3,000	9,000	30
Heptachlorobenzene	<59	<56	<63	<63	<59	300	1,000	2,000
Perylene	<15	<14	<16	<16	<15	—	—	—
Biphenyl	<15	<14	<16	<16	<15	3,000,000	28,000,000	—
2,6-Dimethylanthracene	<15	<14	<16	<16	<15	—	—	—
1-Methylphenanthrene	<15	<14	<16	<16	<15	—	—	—
Benzofluoranthene	<15	<14	<16	<16	<15	—	—	—
Heptachlorobenzene	<59	<56	<63	<63</				



TABLE 3B  
Surfacewater Analytical Results  
Semi-VOCs  
U.S. Tsubaki, Bennington, Vermont

Sample ID Date Collected Collected By	SW-1 2/16/2006 JMP	SW-2 2/16/2006 JMP	VT Water Quality Standards*			
			Protection of Human Health		Protection of Aquatic Biota	
			Consumption of Water & Organisms	Consumption of Organisms Only	Maximum Allowable Concentration - Acute Criteria *	Maximum Allowable Concentration - Chronic Criteria *
<b>Semi-Volatile Organic Compounds (Semi-VOCs) (µg/L)</b>						
Acephenanthrene	<5.0	<4.8	—	—	—	—
Benzo(a)anthracene	<5.0	<4.8	0.0012	0.00054	—	—
1,2,4-Trichlorobenzene	<5.0	<4.8	—	—	—	—
Hexachlorobenzene	<5.0	<4.8	0.0075	0.0077	—	—
Bis(2-chloroethyl)ether	<5.0	<4.8	0.031	1.4	—	—
1-Chloronaphthalene	<5.0	<4.8	—	—	—	—
2-Chloronaphthalene	<5.0	<4.8	—	—	—	—
1,2-Dichlorobenzene	<5.0	<4.8	2,700	17,000	—	—
1,3-Dichlorobenzene	<5.0	<4.8	400	2,600	—	—
1,4-Dichlorobenzene	<5.0	<4.8	400	2,600	—	—
3,3'-Dichlorobenzidine	<5.0	<4.8	0.04	0.077	—	—
2,4-Dinitrotoluene	<5.0	<4.8	0.11	9.10	—	—
2,6-Dinitrotoluene	<5.0	<4.8	—	—	—	—
Azobenzene	<5.0	<4.8	—	—	—	—
Fluoranthene	<5.0	<4.8	300	370	—	—
4-Chlorophenyl phenyl ether	<5.0	<4.8	—	—	—	—
4-Bromophenyl phenyl ether	<5.0	<4.8	—	—	—	—
Bis(2-chloroisopropyl) ether	<5.0	<4.8	1,400	170,000	—	—
Bis(2-chloroethoxy) methane	<5.0	<4.8	—	—	—	—
Hexachlorobutadiene	<10	<9.7	0.44	50	—	—
Hexachlorocyclopentadiene	<10	<9.7	240	17,000	—	—
Hexachloroethane	<5.0	<4.8	1.9	8.9	—	—
Isophorone	<5.0	<4.8	—	—	—	—
Naphthalene	<5.0	<4.8	—	—	—	—
Nitrobenzene	<5.0	<4.8	17	1,900	—	—
NDPA/DPA	<15	<14	—	—	—	—
n-Nitrosodi-n-propylamine	<5.0	<4.8	—	—	—	—
Bis(2-ethylhexyl)phthalate	<10	<9.7	1.8	5.9	—	—
Butyl benzyl phthalate	<5.0	<4.8	—	—	—	—
Di-n-butylphthalate	<5.0	<4.8	—	—	—	—
Di-n-octylphthalate	<5.0	<4.8	—	—	—	—
Diethyl phthalate	<5.0	<4.8	—	—	—	—
Dimethyl phthalate	<5.0	<4.8	—	—	—	—
Benzo(a)anthracene	<5.0	<4.8	0.0028	0.031	—	—
Benzo(a)pyrene	<5.0	<4.8	0.0028	0.031	—	—
Benzo(b)fluoranthene	<5.0	<4.8	0.0028	0.031	—	—
Benzo(k)fluoranthene	<5.0	<4.8	0.0028	0.031	—	—
Chrysene	<5.0	<4.8	0.0028	0.031	—	—
Acenaphthylene	<5.0	<4.8	—	—	—	—
Anthracene	<5.0	<4.8	9,600	110,000	—	—
Benzo(ghi)perylene	<5.0	<4.8	—	—	—	—
Fluorene	<5.0	<4.8	1,300	14,000	—	—
Phenanthrene	<5.0	<4.8	—	—	—	—
Dibenzo(a,h)anthracene	<5.0	<4.8	0.0028	0.031	—	—
Indeno (1,2,3-cd) pyrene	<7.0	<6.8	0.0028	0.031	—	—
Pyrene	<5.0	<4.8	960	11,000	—	—
Benzo(e)pyrene	<5.0	<4.8	—	—	—	—
Biphenyl	<5.0	<4.8	—	—	—	—
Perylene	<5.0	<4.8	—	—	—	—
Aniline	<10	<9.7	—	—	—	—
4-Chloroaniline	<5.0	<4.8	—	—	—	—
1-Methylnaphthalene	<5.0	<4.8	—	—	—	—
2-Nitroaniline	<5.0	<4.8	—	—	—	—
3-Nitroaniline	<5.0	<4.8	—	—	—	—
4-Nitroaniline	<7.0	<6.8	—	—	—	—
Dibenzofuran	<5.0	<4.8	—	—	—	—
a,a'-Dimethylphenethylamine	<5.0	<4.8	—	—	—	—
Hexachloropropene	<10	<9.7	—	—	—	—
Nitrosodi-n-butylamine	<10	<9.7	—	—	—	—
2-Methylnaphthalene	<5.0	<4.8	—	—	—	—
1,2,4,5-Tetrachlorobenzene	<20	<19	—	—	—	—
Pentachlorobenzene	<20	<19	—	—	—	—
a-Naphthylamine	<20	<19	—	—	—	—
b-Naphthylamine	<20	<19	—	—	—	—
Phenacetin	<10	<9.7	—	—	—	—
Dimethoate	<20	<19	—	—	—	—
4-Aminobiphenyl	<10	<9.7	—	—	—	—
Pentachloronitrobenzene	<10	<9.7	—	—	—	—
Isodrin	<10	<9.7	—	—	—	—
p-Dimethylaminoazobenzene	<10	<9.7	—	—	—	—
Chlorobenzilate	<20	<19	—	—	—	—
3-Methylcholanthrene	<20	<19	—	—	—	—
Ethyl methanesulfonate	<15	<14	—	—	—	—
Acetophenone	<20	<19	—	—	—	—
Nitrosodipiperidine	<20	<19	—	—	—	—
7,12-Dimethylbenz(a)anthracene	<10	<9.7	—	—	—	—
n-Nitrosodimethylamine	<50	<48	0.00089	8.1	—	—
2,4,6-Trichlorophenol	<5.0	<4.8	2.1	6.5	—	—
p-Chloro-m-cresol	<5.0	<4.8	—	—	—	—
2-Chlorophenol	<5.0	<4.8	—	—	—	—
2,4-Dichlorophenol	<10	<9.7	93	790	—	—
2,4-Dimethylphenol	<10	<9.7	—	—	—	—
2-Nitrophenol	<20	<19	—	—	—	—
4-Nitrophenol	<10	<9.7	—	—	—	—
2,4-Dinitrophenol	<20	<19	70	14,000	—	—
4,6-Dinitro-o-cresol	<20	<19	—	—	—	—
Pentachlorophenol	<20	<19	0.28	8.2	exp(1.005(pH) - 4.830)	exp(1.005(pH) - 5.290)
Phenol	<7.0	<6.8	21,000	4,600,000	—	—
2-Methylphenol	<5.0	<4.8	—	—	—	—
3-Methylphenol/4-Methylphenol	<5.0	<4.8	—	—	—	—
2,4,5-Trichlorophenol	<5.0	<4.8	—	—	—	—
2,6-Dichlorophenol	<10	<9.7	—	—	—	—
Benzoic Acid	<50	<48	—	—	—	—
Benzyl Alcohol	<10	<9.7	—	—	—	—
Carbazole	<5.0	<4.8	—	—	—	—
Pyridine	<50	<48	—	—	—	—
2-Picoline	<20	<19	—	—	—	—
Pronamide	<20	<19	—	—	—	—
Methyl methanesulfonate	<20	<19	—	—	—	—

Bold text indicates that the concentration exceeds the applicable water quality standard.

\* Vermont Water Quality Standards, Appendix C: Water Quality Criteria for the Protection of Human Health and the Aquatic Biota (Effective July 2, 2000)

a = Maximum Allowable Concentration (MAC) = the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) once every three years without deleterious effects. Average Allowable Concentration (AAC) - the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) once every three years without deleterious effects. The MAC is equivalent to the Federal Criteria Maximum Concentration (CMC) and the AAC is equivalent to the Federal Criteria Continuous Concentration (CCC).

b = Aquatic life criteria for this metal is expressed as a function of total hardness (mg/L as CaCO<sub>3</sub>), and as a function of the pollutant's water effect ratio (WER). Unless otherwise determined by the Secretary, in a manner consistent with the most current USEPA guidance, the WER shall be 1.0.

— = Indicates that a regulatory standard has not been established for that compound.

TABLE 3A  
Surfacewater Analytical Results  
VOCs and Total Metals  
U.S. Tsubaki, Bennington, Vermont

Sample ID Date Collected Collected By	SW-1 2/16/2006 JMP	SW-2 2/16/2006 JMP	VT Water Quality Standards*			
			Protection of Human Health		Protection of Aquatic Biota	
			Consumption of Water & Organisms	Consumption of Organisms Only	Maximum Allowable Concentration - Acute Criteria *	Maximum Allowable Concentration - Chronic Criteria *
<b>Total Metals (µg/L)</b>			µg/L	µg/L	µg/L	µg/L
Antimony, Total	<0.5	<0.5	—	—	—	—
Arsenic, Total	<0.5	<0.5	0.02	1.50	380	190
Barium, Total	—	—	—	—	—	—
Beryllium, Total	<0.5	<0.5	—	—	—	—
Cadmium, Total <sup>b</sup>	<0.5	<0.5	—	—	exp(1.128 (ln hardness) - 3.828)	exp(0.7852 (ln hardness) - 3.400)
Chromium, Total	<0.5	<0.5	—	—	16	11
Copper, Total	0.6	<0.5	—	—	exp(0.9422(ln hardness)-1.464)	exp(0.8545(ln hardness)-1.465)
Lead, Total	<0.5	<0.5	—	—	exp(1.273 (ln hardness) - 1.460)	exp(1.273 (ln hardness) - 4.705)
Mercury, Total	<0.2	<0.2	0.14	0.15	2	0
Nickel, Total	<0.5	<0.5	—	—	exp(0.8460(ln hardness)+3.3610)	exp(0.8460(ln hardness)+3.3610)
Selenium, Total	<1.0	<1.0	—	—	20	5
Silver, Total	<0.5	<0.5	—	—	exp(1.72 (ln hardness) - 6.52)	—
Thallium, Total	<0.5	<0.5	1.7	6.3	—	—
Zinc, Total***	12.0	<0.5	7,400	26,000	120	120
<b>Volatile Organic Compounds (VOCs) (µg/L)</b>						
1,1,1,2-Tetrachloroethane	<0.50	<0.50	—	—	—	—
1,1,1-Trichloroethane	<0.50	<0.50	—	—	—	—
1,1,2,2-Tetrachloroethane	<0.50	<0.50	0.17	11	—	—
1,1,2-Trichloroethane	<0.75	<0.75	0.60	42	—	—
1,1-Dichloroethane	<0.75	<0.75	—	—	—	—
1,1-Dichloroethene	<0.50	<0.50	0.1	3.2	—	—
1,1-Dichloropropene	<2.5	<2.5	—	—	—	—
1,2,3-Trichlorobenzene	<2.5	<2.5	—	—	—	—
1,2,3-Trichloropropane	<5.0	<5.0	—	—	—	—
1,2,4-Trichlorobenzene	<2.5	<2.5	—	—	—	—
1,2,4-Trimethylbenzene	<2.5	<2.5	—	—	—	—
1,2-Dibromo-3-chloropropane	<2.5	<2.5	—	—	—	—
1,2-Dibromoethane	<2.0	<2.0	—	—	—	—
1,2-Dichlorobenzene	<2.5	<2.5	2700	17000	—	—
1,2-Dichloroethane	<0.50	<0.50	0.4	99	—	—
1,2-Dichloropropane	<1.8	<1.8	—	—	—	—
1,3,5-Trimethylbenzene	<2.5	<2.5	—	—	—	—
1,3-Dichlorobenzene	<2.5	<2.5	400	2600	—	—
1,3-Dichloropropane	<2.5	<2.5	—	—	—	—
1,4-Dichlorobenzene	<2.5	<2.5	400	2600	—	—
2,2-Dichloropropane	<2.5	<2.5	—	—	—	—
2-Butanone (MEK)	<5.0	<5.0	—	—	—	—
2-Hexanone	<5.0	<5.0	—	—	—	—
4-Methyl-2-pentanone (MIBK)	<5.0	<5.0	—	—	—	—
Acetone	<5.0	<5.0	—	—	—	—
Acrolein	<12	<12	320	780	—	—
Acrylonitrile	<5.0	<5.0	0.1	0.7	—	—
Benzene	<0.50	<0.50	1.2	71	—	—
Bromobenzene	<2.5	<2.5	—	—	—	—
Bromochloromethane	<2.5	<2.5	—	—	—	—
Bromodichloromethane	<2.5	<0.50	—	—	—	—
Bromoform	<2.0	<2.0	4.3	360	—	—
Bromomethane	<1.0	<1.0	—	—	—	—
Carbon disulfide	<5.0	<5.0	—	—	—	—
Carbon tetrachloride	<0.50	<5.0	0.3	4.4	—	—
Chlorobenzene	<0.50	<0.50	—	—	—	—
Chloroethane	<1.0	<1.0	—	—	—	—
Chloroform	<0.75	<0.75	5.7	470	—	—
Chloromethane	<2.5	<2.5	—	—	—	—
Dibromochloromethane	<0.50	<0.50	—	—	—	—
Dibromomethane	<5.0	<5.0	—	—	—	—
Dichlorodifluoromethane	<5.0	<5.0	—	—	—	—
1,4-Dichlorobutane	<5.0	<5.0	—	—	—	—
Ethylbenzene	<0.50	<0.50	3,100	29,000	—	—
Ethyl ether	<2.5	<2.5	—	—	—	—
Ethyl methacrylate	<5.0	<5.0	—	—	—	—
Hexachlorobutadiene	<0.60	<0.60	0.4	50.0	—	—
Iodomethane	<5.0	<5.0	—	—	—	—
Isopropylbenzene	<0.50	<0.50	—	—	—	—
Methyl-tert-butyl-ether (MTBE)	<1.0	<1.0	—	—	—	—
Methylene chloride	<5.0	<5.0	4.7	1600	—	—
Naphthalene	<2.5	<2.5	—	—	—	—
Styrene	<1.0	<1.0	—	—	—	—
Tetrachloroethene	<0.50	<0.50	0.8	8.85	—	—
Tetrahydrofuran	<10	<10	—	—	—	—
Toluene	<0.75	<0.75	8,800	200,000	—	—
Trichloroethene (TCE)	<0.50	<0.50	2.7	81	—	—
Trichlorofluoromethane	<2.5	<2.5	—	—	—	—
Vinyl acetate	<5.0	<5.0	—	—	—	—
Vinyl chloride	<1.0	<1.0	2	525	—	—
cis-1,3-Dichloropropene	<0.50	<0.50	—	—	—	—
trans-1,3-Dichloropropene	<0.50	<0.50	—	—	—	—
cis-1,2-Dichloroethene	<0.50	<0.50	—	—	—	—
trans-1,2-Dichloroethene	<0.75	<0.75	—	—	—	—
trans-1,4-Dichloro-2-butene	<2.5	<2.5	—	—	—	—
m&P-Xylenes	<1.0	<1.0	—	—	—	—
o-Chlorotoluene	<2.5	<2.5	—	—	—	—
o-Xylene	<1.0	<1.0	—	—	—	—
n-Butylbenzene	<0.50	<0.50	—	—	—	—
n-Propylbenzene	<0.50	<0.50	—	—	—	—
p-Chlorotoluene	<2.5	<2.5	—	—	—	—
p-Isopropyltoluene	<0.50	<0.50	—	—	—	—
sec-Butylbenzene	<0.50	<0.50	—	—	—	—
tert-Butylbenzene	<2.5	<2.5	—	—	—	—

— = Indicates that a regulatory standard has not been established for that compound.

*Italic* text indicates that the laboratory method detection limit exceeds the applicable water quality standard - Protection of Human Health: Consumption of Water & Organisms.

**Bold** text indicates that the concentration exceeds the applicable water quality standard.

\* Vermont Water Quality Standards, Appendix C: Water Quality Criteria for the Protection of Human Health and the Aquatic Biota (Effective July 2, 2000)

a = Maximum Allowable Concentration (MAC) = the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) once every three years without deleterious effects. Average Allowable Concentration (AAC) - the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) once every three years without deleterious effects. The MAC is equivalent to the Federal Criteria Maximum Concentration (CMC) and the AAC is equivalent to the Federal Criteria Continuous Concentration (CCC).

b = Aquatic life criteria for this metal is expressed as a function of total hardness (mg/l as CaCO<sub>3</sub>), and as a function of the pollutant's water effect ratio (WER). Unless otherwise determined by the Secretary, in a manner consistent with the most current USEPA guidance, the WER shall be 1.0.

\*\*\* U.S. EPA National Recommended Water Quality Criteria. The freshwater criterion for this metal is expressed as a function of hardness (mg/L) in the water column.

The value given here corresponds to a hardness of 100 mg/L.

**TABLE 4A**  
Sediment Analytical Results  
VOCs and Total Metals  
U.S. Tsubaki, Bennington, Vermont

Sample ID	SED-3	SED-4	Trench Drain	EPA Region 9 PRGs <sup>1</sup>			Ontario Sediment Quality Guidelines (8/93)	
Date Collected	2/16/2006	2/16/2006	2/16/2006	Residential	Industrial	DAF 20 <sup>3</sup>	Lowest Effect	Severe Effect
Collected By	JMP	JMP	JMP	µg/kg	µg/kg	µg/kg	µg/g	µg/g
<b>Volatile Organic Compounds (µg/kg)</b>								
1,1,1,2-Tetrachloroethane	<89	<59	<72	3,200	7,300	—	—	—
1,1,1-Trichloroethane	<89	<59	<72	1,200,000	1,200,000	2,000	—	—
1,1,2,2-Tetrachloroethane	<89	<59	<72	410	930	3	—	—
1,1,2-Trichloroethane	<100	<88	<110	730	1,600	20	—	—
1,1-Dichloroethane	<100	<88	<110	510,000	1,700,000	23,000	—	—
1,1-Dichloroethene	<89	<59	<72	120,000	410,000	60	—	—
1,1-Dichloropropene	<350	<290	<360	—	—	—	—	—
1,2,3-Trichlorobenzene	<350	<290	<360	—	—	—	—	—
1,2,3-Trichloropropane	<890	<590	<720	34	76	—	—	—
1,2,4-Trichlorobenzene	<350	<290	<360	62,000	220,000	5,000	—	—
1,2,4-Trimethylbenzene	<350	<290	<360	52,000	170,000	—	—	—
1,2-Dibromo-3-chloropropane	<350	<290	<360	400	2,000	—	—	—
1,2-Dibromoethane	<280	<240	<290	32	76	—	—	—
1,2-Dichlorobenzene	<350	<290	<360	600,000	600,000	17,000	—	—
1,2-Dichloroethane	<89	<59	<72	28	600	20	—	—
cis-1,2-Dichloroethene	<89	<59	<72	—	—	—	—	—
trans-1,2-Dichloroethene	<100	<88	<110	—	—	—	—	—
1,2-Dichloropropane	<240	<210	<250	34	740	30	—	—
1,3,5-Trimethylbenzene	<350	<290	<360	21,000	70,000	—	—	—
1,3-Dichlorobenzene	<350	<290	<360	530,000	600,000	—	—	—
1,3-Dichloropropane	<350	<290	<360	100,000	360,000	—	—	—
cis-1,3-Dichloropropene	<89	<59	<72	—	—	—	—	—
trans-1,3-Dichloropropene	<89	<59	<72	—	—	—	—	—
1,4-Dichlorobutane	<890	<590	<720	—	—	—	—	—
1,4-Dichlorobenzene	<350	<290	<360	3,400	7,900	2,000	—	—
trans-1,4-Dichloro-2-butene	<350	<290	<360	7.9	18	—	—	—
2,2-Dichloropropane	<350	<290	<360	—	—	—	—	—
2-Butanone (MEK)	<890	<590	<720	22,000,000	110,000,000	—	—	—
2-Hexanone	<890	<590	<720	—	—	—	—	—
4-Methyl-2-pentanone	<890	<590	<720	—	—	—	—	—
Acetone	<890	<590	<720	14,000,000	54,000,000	16,000	—	—
Acrolein	<1700	<1500	<1800	100	340	—	—	—
Acrylonitrile	<890	<590	<720	210	490	—	—	—
Benzene	<89	<59	<72	640	1400	30	—	—
Bromobenzene	<350	<290	<360	28,000	92,000	—	—	—
Bromochloromethane	<350	<290	<72	—	—	—	—	—
Bromodichloromethane	<89	<59	<72	820	1800	600	—	—
Bromofom	<280	<240	<290	62000	220000	800	—	—
Bromomethane	<140	<120	<140	3900	13000	200	—	—
n-Butylbenzene	<89	<59	<72	240,000	240,000	—	—	—
sec-Butylbenzene	<89	<59	<72	220,000	220,000	—	—	—
tert-Butylbenzene	<350	<290	<360	360,000	360,000	—	—	—
Carbon disulfide	<890	<590	<720	360,000	720,000	32,000	—	—
Carbon tetrachloride	<89	<59	<72	250	550	70	—	—
Chlorobenzene	<89	<59	<72	150000	530000	1000	—	—
Chloroethane	<350	<120	<140	3,000	6,500	—	—	—
Chloroform	<100	<88	<110	220	470	800	—	—
Chloromethane	<350	<290	<360	47,000	180,000	—	—	—
o-Chlorotoluene	<350	<290	<360	160,000	560,000	—	—	—
p-Chlorotoluene	<350	<290	<360	—	—	—	—	—
Dibromochloromethane	<89	<59	<72	1100	2600	400	—	—
Dibromomethane	<890	<590	<72	—	—	—	—	—
Dichlorodifluoromethane	<890	<590	<720	94,000	310,000	—	—	—
Ethylbenzene	<89	<59	<72	400,000	400,000	13,000	—	—
Ethyl ether	<350	<290	<360	1,800,000	1,800,000	—	—	—
Ethyl methacrylate	<890	<590	<720	140,000	140,000	—	—	—
Hexachlorobutadiene	<350	<290	<360	6200	22000	2000	—	—
Iodomethane	<890	<590	<720	—	—	—	—	—
Isopropylbenzene	<89	<59	<72	—	—	—	—	—
p-Isopropyltoluene	<89	<59	<72	—	—	—	—	—
Methyl-t-butylether (MTBE)	<140	<120	<140	32,000	70,000	—	—	—
Methylene chloride	<890	<590	<720	9,100	21,000	20	—	—
Naphthalene	<350	<290	<360	56,000	190,000	84,000	—	—
n-Propylbenzene	<89	<59	<72	240,000	240,000	—	—	—
Styrene	<140	<120	<140	1700000	1700000	4000	—	—
Tetrachloroethene (PCE)	<89	<59	<72	480	1300	60	—	—
Tetrahydrofuran	<1400	<1200	<1400	9400	21000	—	—	—
Toluene	<100	<88	<110	520,000	520,000	12,000	—	—
Trichloroethene (TCE)	<89	<59	<72	53	110	60	—	—
Trichlorofluoromethane	<350	<290	<360	390,000	2,000,000	—	—	—
Vinyl acetate	<890	<590	<720	430,000	1,400,000	170,000	—	—
Vinyl chloride	<140	<120	<140	79,000	750	10	—	—
m&p-Xylenes	<140	<120	<140	270,000	420,000	210,000	—	—
o-Xylene	<140	<120	<140	270,000	420,000	210,000	—	—
<b>Total Metals (mg/Kg)</b>								
Antimony, Total	<3.1	<2.7	<6.0	31	410	5	—	—
Arsenic, Total	3.1	4.70	6.50	0.39	1.6	29	6	33
Barium, Total	NA	NA	NA	5,400	67,000	1,600	—	—
Beryllium, Total	<0.31	<0.27	<0.80	150	1,900	63	—	—
Cadmium, Total	<0.82	<0.64	2.0	37	450	8	0.6	10
Chromium, Total	6.2	4.4	150	210	450	38	26	110
Copper, Total	6.9	9.9	210	3,100	41,000	—	16	110
Lead, Total	10	10.0	23	400	800	—	31	250
Mercury, Total	<0.12	<0.10	<0.12	23	310	—	0.2	2
Nickel, Total	4.6	6.7	79	390	5,100	5	16	75
Selenium, Total	<1.2	<1.1	<2.4	390	5,100	5	—	—
Silver, Total	<0.82	<0.64	<1.2	390	5,100	34	—	—
Thallium, Total	<0.62	0.55	<1.2	5.2	67	—	—	—
Zinc, Total	59.0	30	160	23,000	100,000	12,000	120	820

(1) In Vermont, adequate site characterization must be performed to demonstrate that sediments are not adversely affected by contaminants at the site. Sediment laboratory analytical results have been compared to screening values contained in *Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario (Canada) (August 1993)*.

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

NA = Indicates that the sample was not analyzed by that method.

— = Indicates that a standard has not been published for that compound.

<170 = Indicates that the compound was not detected at a concentration above the laboratory method detection limit.

Bold text indicates that the concentration detected exceeds the applicable screening value.

NS = Not sampled

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Tighe & Bond

Laboratory Job Number: L0602382

Address: 53 Southampton Road

Westfield, MA 01085

Date Received: 17-FEB-2006

Attn: Mr. Jason Perry

Date Reported: 24-FEB-2006

Project Number: B-0360-5-69

Delivery Method: Alpha

Site: US TSUBAKI

---

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0602382-01	MW-3 (1B)	BENNINGTON, VT
L0602382-02	MW-1 (1B)	BENNINGTON, VT
L0602382-03	DUPLICATE	BENNINGTON, VT
L0602382-04	MW-2 (1B)	BENNINGTON, VT
L0602382-05	TRIP BLANK-8260	BENNINGTON, VT
L0602382-06	T-1 COMPOSITE	BENNINGTON, VT
L0602382-07	TRENCH DRAIN	BENNINGTON, VT
L0602382-08	TRIP BLANKS	BENNINGTON, VT
L0602382-09	SW-2	BENNINGTON, VT
L0602382-10	SW-1	BENNINGTON, VT
L0602382-11	SED-4	BENNINGTON, VT
L0602382-12	SED-3	BENNINGTON, VT

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

---

Authorized by:

  
Technical Director

**ALPHA ANALYTICAL LABORATORIES  
NARRATIVE REPORT**

**Laboratory Job Number: L0602382**

---

PCB

L0602382-07 has elevated limits of detection due to the 2x dilution required by the matrix interferences encountered during the extraction, concentration, and/or digestion of the sample.

Total Metals

L0602382-07 required a 2x dilution for the analysis of all elements (except Mercury) due to spectral interferences encountered during analysis because of the elevated concentration of Iron in the sample.

SemiVolatile Organics

The LCS % recovery for 2,4-Dinitrotoluene is above the acceptance criteria for the method.

The MS % recoveries for the following are below the acceptance criteria for the method: 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, Hexachloropropene, 2-Chloronaphthalene, Acenaphthene, and 2-Fluorobiphenyl.

The MSD % recoveries for 4-Nitrophenol and 2,4-Dinitrotoluene are above the acceptance criteria for the method.

The MS/MSD RPDs for all compounds (except N-nitrosodi-n-propylamine and 4-Nitrophenol) are above the acceptance criteria for the method.

The surrogate % recovery for 2-Fluorobiphenyl is below the acceptance criteria for the method on the Method Blank. No sample remained for re-extraction.

PAH by method 8270C-SIM

All requested VT GW standards were not achieved on L0602382-01, -02, -04, -09, and -10.

The MS % recoveries for the following are below the acceptance criteria for the method: Acenaphthene, 2-Chloronaphthalene, Fluoranthene, Anthracene, and 2-Fluorobiphenyl.

All MS/MSD RPDs are above the acceptance criteria for the method.

The surrogate % recovery for 2-Fluorobiphenyl is below the acceptance criteria for the method.

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0602382-01	<b>Date Collected:</b> 16-FEB-2006 10:40
MW-3 (1B)	<b>Date Received :</b> 17-FEB-2006
<b>Sample Matrix:</b> WATER	<b>Date Reported :</b> 24-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 2-Amber,1-Plastic,2-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Total Metals						
Antimony, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Arsenic, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Beryllium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Cadmium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Chromium, Total	0.0009	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Copper, Total	0.0010	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Lead, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Mercury, Total	ND	mg/l	0.0002	1 7470A	0223 19:00 0224 11:52	DM
Nickel, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Selenium, Total	ND	mg/l	0.001	1 6020	0223 16:00 0224 00:52	BM
Silver, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Thallium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 00:52	BM
Zinc, Total	0.0068	mg/l	0.0050	1 6020	0223 16:00 0224 00:52	BM
Volatile Organics by GC/MS 8260				1 8260B	0222 15:34	PD
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	2.5			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
1,1-Dichloropropene	ND	ug/l	2.5			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Toluene	ND	ug/l	0.75			
Ethylbenzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-01  
MW-3 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 15:34 PD	
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-01  
MW-3 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1 8260B	0222 15:34 PD	
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	100	%	70-130			
Toluene-d8	102	%	70-130			
4-Bromofluorobenzene	106	%	70-130			
Dibromofluoromethane	100	%	70-130			
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 19:54 RL	
Acenaphthene	ND	ug/l	5.0			
Benidine	ND	ug/l	50.			
1,2,4-Trichlorobenzene	ND	ug/l	5.0			
Hexachlorobenzene	ND	ug/l	5.0			
Bis(2-chloroethyl)ether	ND	ug/l	5.0			
1-Chloronaphthalene	ND	ug/l	5.0			
2-Chloronaphthalene	ND	ug/l	6.0			
1,2-Dichlorobenzene	ND	ug/l	5.0			
1,3-Dichlorobenzene	ND	ug/l	5.0			
1,4-Dichlorobenzene	ND	ug/l	5.0			
3,3'-Dichlorobenzidine	ND	ug/l	50.			
2,4-Dinitrotoluene	ND	ug/l	6.0			
2,6-Dinitrotoluene	ND	ug/l	5.0			
Azobenzene	ND	ug/l	5.0			
Fluoranthene	ND	ug/l	5.0			
4-Chlorophenyl phenyl ether	ND	ug/l	5.0			
4-Bromophenyl phenyl ether	ND	ug/l	5.0			
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0			
Bis(2-chloroethoxy)methane	ND	ug/l	5.0			
Hexachlorobutadiene	ND	ug/l	10.			
Hexachlorocyclopentadiene	ND	ug/l	10.			
Hexachloroethane	ND	ug/l	5.0			
Isophorone	ND	ug/l	5.0			
Naphthalene	ND	ug/l	5.0			
Nitrobenzene	ND	ug/l	5.0			
NDPA/DPA	ND	ug/l	15.			
n-Nitrosodi-n-propylamine	ND	ug/l	5.0			
Bis(2-ethylhexyl)phthalate	ND	ug/l	10.			
Butyl benzyl phthalate	ND	ug/l	5.0			
Di-n-butylphthalate	ND	ug/l	5.0			
Di-n-octylphthalate	ND	ug/l	5.0			
Diethyl phthalate	ND	ug/l	5.0			
Dimethyl phthalate	ND	ug/l	5.0			
Benzo(a)anthracene	ND	ug/l	5.0			
Benzo(a)pyrene	ND	ug/l	5.0			
Benzo(b)fluoranthene	ND	ug/l	5.0			
Benzo(k)fluoranthene	ND	ug/l	5.0			
Chrysene	ND	ug/l	5.0			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-01  
MW-3 (1B)

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0220 12:00	0222 19:54	RL
Acenaphthylene	ND	ug/l	5.0					
Anthracene	ND	ug/l	5.0					
Benzo(ghi)perylene	ND	ug/l	5.0					
Fluorene	ND	ug/l	5.0					
Phenanthrene	ND	ug/l	5.0					
Dibenzo(a,h)anthracene	ND	ug/l	5.0					
Indeno(1,2,3-cd)pyrene	ND	ug/l	7.0					
Pyrene	ND	ug/l	5.0					
Benzo(e)pyrene	ND	ug/l	5.0					
Biphenyl	ND	ug/l	5.0					
Perylene	ND	ug/l	5.0					
Aniline	ND	ug/l	10.					
4-Chloroaniline	ND	ug/l	5.0					
1-Methylnaphthalene	ND	ug/l	5.0					
2-Nitroaniline	ND	ug/l	5.0					
3-Nitroaniline	ND	ug/l	5.0					
4-Nitroaniline	ND	ug/l	7.0					
Dibenzofuran	ND	ug/l	5.0					
a,a-Dimethylphenethylamine	ND	ug/l	50.					
Hexachloropropene	ND	ug/l	10.					
Nitrosodi-n-butylamine	ND	ug/l	10.					
2-Methylnaphthalene	ND	ug/l	5.0					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.					
Pentachlorobenzene	ND	ug/l	20.					
a-Naphthylamine	ND	ug/l	20.					
b-Naphthylamine	ND	ug/l	20.					
Phenacetin	ND	ug/l	10.					
Dimethoate	ND	ug/l	20.					
4-Aminobiphenyl	ND	ug/l	10.					
Pentachloronitrobenzene	ND	ug/l	10.					
Isodrin	ND	ug/l	10.					
p-Dimethylaminoazobenzene	ND	ug/l	10.					
Chlorobenzilate	ND	ug/l	20.					
3-Methylcholanthrene	ND	ug/l	20.					
Ethyl Methanesulfonate	ND	ug/l	15.					
Acetophenone	ND	ug/l	20.					
Nitrosodipiperidine	ND	ug/l	20.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	10.					
n-Nitrosodimethylamine	ND	ug/l	50.					
2,4,6-Trichlorophenol	ND	ug/l	5.0					
p-Chloro-m-cresol	ND	ug/l	5.0					
2-Chlorophenol	ND	ug/l	6.0					
2,4-Dichlorophenol	ND	ug/l	10.					
2,4-Dimethylphenol	ND	ug/l	10.					
2-Nitrophenol	ND	ug/l	20.					
4-Nitrophenol	ND	ug/l	10.					
2,4-Dinitrophenol	ND	ug/l	20.					
4,6-Dinitro-o-cresol	ND	ug/l	20.					
Pentachlorophenol	ND	ug/l	20.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-01  
MW-3 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 19:54 RL	
Phenol	ND	ug/l	7.0			
2-Methylphenol	ND	ug/l	6.0			
3-Methylphenol/4-Methylphenol	ND	ug/l	6.0			
2,4,5-Trichlorophenol	ND	ug/l	5.0			
2,6-Dichlorophenol	ND	ug/l	10.			
Benzoic Acid	ND	ug/l	50.			
Benzyl Alcohol	ND	ug/l	10.			
Carbazole	ND	ug/l	5.0			
Pyridine	ND	ug/l	50.			
2-Picoline	ND	ug/l	20.			
Pronamide	ND	ug/l	20.			
Methyl methanesulfonate	ND	ug/l	20.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	48.0	%	21-120			
Phenol-d6	43.0	%	10-120			
Nitrobenzene-d5	87.0	%	23-120			
2-Fluorobiphenyl	63.0	%	43-120			
2,4,6-Tribromophenol	85.0	%	10-120			
4-Terphenyl-d14	94.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 20:33 RL	
Acenaphthene	ND	ug/l	0.20			
2-Chloronaphthalene	ND	ug/l	0.20			
Fluoranthene	ND	ug/l	0.20			
Hexachlorobutadiene	ND	ug/l	0.50			
Naphthalene	ND	ug/l	0.20			
Benzo(a)anthracene	ND	ug/l	0.20			
Benzo(a)pyrene	ND	ug/l	0.20			
Benzo(b)fluoranthene	ND	ug/l	0.20			
Benzo(k)fluoranthene	ND	ug/l	0.20			
Chrysene	ND	ug/l	0.20			
Acenaphthylene	ND	ug/l	0.20			
Anthracene	ND	ug/l	0.20			
Benzo(ghi)perylene	ND	ug/l	0.20			
Fluorene	ND	ug/l	0.20			
Phenanthrene	ND	ug/l	0.20			
Dibenzo(a,h)anthracene	ND	ug/l	0.20			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20			
Pyrene	ND	ug/l	0.20			
1-Methylnaphthalene	ND	ug/l	0.20			
2-Methylnaphthalene	ND	ug/l	0.20			
Pentachlorophenol	ND	ug/l	0.80			
Hexachlorobenzene	ND	ug/l	0.80			
Perylene	ND	ug/l	0.20			
Biphenyl	ND	ug/l	0.20			
2,6-Dimethylnaphthalene	ND	ug/l	0.20			
1-Methylphenanthrene	ND	ug/l	0.20			
Benzo(e)Pyrene	ND	ug/l	0.20			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-01  
 MW-3 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0220 12:00	0222 20:33 RL
Hexachloroethane	ND	ug/l	0.80				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	50.0	%	21-120				
Phenol-d6	39.0	%	10-120				
Nitrobenzene-d5	67.0	%	23-120				
2-Fluorobiphenyl	54.0	%	43-120				
2,4,6-Tribromophenol	69.0	%	10-120				
4-Terphenyl-d14	60.0	%	33-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-02  
MW-1 (1B)  
**Sample Matrix:** WATER  
**Condition of Sample:** Satisfactory  
**Number & Type of Containers:** 2-Amber,1-Plastic,2-Vial

**Date Collected:** 16-FEB-2006 12:05  
**Date Received :** 17-FEB-2006  
**Date Reported :** 24-FEB-2006  
**Field Prep:** None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Beryllium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Cadmium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Chromium, Total	0.0011	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Copper, Total	0.0012	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Lead, Total	0.0007	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Mercury, Total	ND	mg/l	0.0002	1	7470A	0223 19:00	0224 11:54	DM
Nickel, Total	0.0007	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0223 16:00	0224 01:09	BM
Silver, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Thallium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:09	BM
Zinc, Total	0.0064	mg/l	0.0050	1	6020	0223 16:00	0224 01:09	BM
Volatile Organics by GC/MS 8260				1	8260B	0222 16:09 PD		
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	ND	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-02  
MW-1 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 16:09 PD	
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-02  
MW-1 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1 8260B	0222 16:09 PD	
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	102	%	70-130			
Toluene-d8	100	%	70-130			
4-Bromofluorobenzene	106	%	70-130			
Dibromofluoromethane	104	%	70-130			
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 20:18 RL	
Acenaphthene	ND	ug/l	4.8			
Benidine	ND	ug/l	48.			
1,2,4-Trichlorobenzene	ND	ug/l	4.8			
Hexachlorobenzene	ND	ug/l	4.8			
Bis(2-chloroethyl)ether	ND	ug/l	4.8			
1-Chloronaphthalene	ND	ug/l	4.8			
2-Chloronaphthalene	ND	ug/l	5.8			
1,2-Dichlorobenzene	ND	ug/l	4.8			
1,3-Dichlorobenzene	ND	ug/l	4.8			
1,4-Dichlorobenzene	ND	ug/l	4.8			
3,3'-Dichlorobenzidine	ND	ug/l	48.			
2,4-Dinitrotoluene	ND	ug/l	5.8			
2,6-Dinitrotoluene	ND	ug/l	4.8			
Azobenzene	ND	ug/l	4.8			
Fluoranthene	ND	ug/l	4.8			
4-Chlorophenyl phenyl ether	ND	ug/l	4.8			
4-Bromophenyl phenyl ether	ND	ug/l	4.8			
Bis(2-chloroisopropyl)ether	ND	ug/l	4.8			
Bis(2-chloroethoxy)methane	ND	ug/l	4.8			
Hexachlorobutadiene	ND	ug/l	9.7			
Hexachlorocyclopentadiene	ND	ug/l	9.7			
Hexachloroethane	ND	ug/l	4.8			
Isophorone	ND	ug/l	4.8			
Naphthalene	ND	ug/l	4.8			
Nitrobenzene	ND	ug/l	4.8			
NDPA/DPA	ND	ug/l	14.			
n-Nitrosodi-n-propylamine	ND	ug/l	4.8			
Bis(2-ethylhexyl)phthalate	ND	ug/l	9.7			
Butyl benzyl phthalate	ND	ug/l	4.8			
Di-n-butylphthalate	ND	ug/l	4.8			
Di-n-octylphthalate	ND	ug/l	4.8			
Diethyl phthalate	ND	ug/l	4.8			
Dimethyl phthalate	ND	ug/l	4.8			
Benzo(a)anthracene	ND	ug/l	4.8			
Benzo(a)pyrene	ND	ug/l	4.8			
Benzo(b)fluoranthene	ND	ug/l	4.8			
Benzo(k)fluoranthene	ND	ug/l	4.8			
Chrysene	ND	ug/l	4.8			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-02  
MW-1 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0220 12:00 0222 20:18	RL
Acenaphthylene	ND	ug/l	4.8				
Anthracene	ND	ug/l	4.8				
Benzo(ghi)perylene	ND	ug/l	4.8				
Fluorene	ND	ug/l	4.8				
Phenanthrene	ND	ug/l	4.8				
Dibenzo(a,h)anthracene	ND	ug/l	4.8				
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.8				
Pyrene	ND	ug/l	4.8				
Benzo(e)pyrene	ND	ug/l	4.8				
Biphenyl	ND	ug/l	4.8				
Perylene	ND	ug/l	4.8				
Aniline	ND	ug/l	9.7				
4-Chloroaniline	ND	ug/l	4.8				
1-Methylnaphthalene	ND	ug/l	4.8				
2-Nitroaniline	ND	ug/l	4.8				
3-Nitroaniline	ND	ug/l	4.8				
4-Nitroaniline	ND	ug/l	6.8				
Dibenzofuran	ND	ug/l	4.8				
a,a-Dimethylphenethylamine	ND	ug/l	48.				
Hexachloropropene	ND	ug/l	9.7				
Nitrosodi-n-butylamine	ND	ug/l	9.7				
2-Methylnaphthalene	ND	ug/l	4.8				
1,2,4,5-Tetrachlorobenzene	ND	ug/l	19.				
Pentachlorobenzene	ND	ug/l	19.				
a-Naphthylamine	ND	ug/l	19.				
b-Naphthylamine	ND	ug/l	19.				
Phenacetin	ND	ug/l	9.7				
Dimethoate	ND	ug/l	19.				
4-Aminobiphenyl	ND	ug/l	9.7				
Pentachloronitrobenzene	ND	ug/l	9.7				
Isodrin	ND	ug/l	9.7				
p-Dimethylaminoazobenzene	ND	ug/l	9.7				
Chlorobenzilate	ND	ug/l	19.				
3-Methylcholanthrene	ND	ug/l	19.				
Ethyl Methanesulfonate	ND	ug/l	14.				
Acetophenone	ND	ug/l	19.				
Nitrosodipiperidine	ND	ug/l	19.				
7,12-Dimethylbenz(a)anthracene	ND	ug/l	9.7				
n-Nitrosodimethylamine	ND	ug/l	48.				
2,4,6-Trichlorophenol	ND	ug/l	4.8				
p-Chloro-m-cresol	ND	ug/l	4.8				
2-Chlorophenol	ND	ug/l	5.8				
2,4-Dichlorophenol	ND	ug/l	9.7				
2,4-Dimethylphenol	ND	ug/l	9.7				
2-Nitrophenol	ND	ug/l	19.				
4-Nitrophenol	ND	ug/l	9.7				
2,4-Dinitrophenol	ND	ug/l	19.				
4,6-Dinitro-o-cresol	ND	ug/l	19.				
Pentachlorophenol	ND	ug/l	19.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-02  
MW-1 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 20:18 RL	
Phenol	ND	ug/l	6.8			
2-Methylphenol	ND	ug/l	5.8			
3-Methylphenol/4-Methylphenol	ND	ug/l	5.8			
2,4,5-Trichlorophenol	ND	ug/l	4.8			
2,6-Dichlorophenol	ND	ug/l	9.7			
Benzoic Acid	ND	ug/l	48.			
Benzyl Alcohol	ND	ug/l	9.7			
Carbazole	ND	ug/l	4.8			
Pyridine	ND	ug/l	48.			
2-Picoline	ND	ug/l	19.			
Pronamide	ND	ug/l	19.			
Methyl methanesulfonate	ND	ug/l	19.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	43.0	%	21-120			
Phenol-d6	39.0	%	10-120			
Nitrobenzene-d5	83.0	%	23-120			
2-Fluorobiphenyl	59.0	%	43-120			
2,4,6-Tribromophenol	75.0	%	10-120			
4-Terphenyl-d14	87.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 21:18 RL	
Acenaphthene	ND	ug/l	0.19			
2-Chloronaphthalene	ND	ug/l	0.19			
Fluoranthene	ND	ug/l	0.19			
Hexachlorobutadiene	ND	ug/l	0.48			
Naphthalene	ND	ug/l	0.19			
Benzo(a)anthracene	ND	ug/l	0.19			
Benzo(a)pyrene	ND	ug/l	0.19			
Benzo(b)fluoranthene	ND	ug/l	0.19			
Benzo(k)fluoranthene	ND	ug/l	0.19			
Chrysene	ND	ug/l	0.19			
Acenaphthylene	ND	ug/l	0.19			
Anthracene	ND	ug/l	0.19			
Benzo(ghi)perylene	ND	ug/l	0.19			
Fluorene	ND	ug/l	0.19			
Phenanthrene	ND	ug/l	0.19			
Dibenzo(a,h)anthracene	ND	ug/l	0.19			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.19			
Pyrene	ND	ug/l	0.19			
1-Methylnaphthalene	ND	ug/l	0.19			
2-Methylnaphthalene	ND	ug/l	0.19			
Pentachlorophenol	ND	ug/l	0.78			
Hexachlorobenzene	ND	ug/l	0.78			
Perylene	ND	ug/l	0.19			
Biphenyl	ND	ug/l	0.19			
2,6-Dimethylnaphthalene	ND	ug/l	0.19			
1-Methylphenanthrene	ND	ug/l	0.19			
Benzo(e)Pyrene	ND	ug/l	0.19			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0602382-02  
MW-1 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0220 12:00	0222 21:18 RL
Hexachloroethane	ND	ug/l	0.78				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	47.0	%	21-120				
Phenol-d6	38.0	%	10-120				
Nitrobenzene-d5	67.0	%	23-120				
2-Fluorobiphenyl	56.0	%	43-120				
2,4,6-Tribromophenol	71.0	%	10-120				
4-Terphenyl-d14	59.0	%	33-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0602382-03	Date Collected: 16-FEB-2006 00:00
DUPLICATE	Date Received : 17-FEB-2006
Sample Matrix: WATER	Date Reported : 24-FEB-2006
Condition of Sample: Satisfactory	Field Prep: None
Number & Type of Containers: 1-Plastic	

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Beryllium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Cadmium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Chromium, Total	0.0011	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Copper, Total	0.0015	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Lead, Total	0.0009	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Mercury, Total	ND	mg/l	0.0002	1	7470A	0223 19:00	0224 11:56	DM
Nickel, Total	0.0007	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0223 16:00	0224 01:14	BM
Silver, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Thallium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:14	BM
Zinc, Total	0.0079	mg/l	0.0050	1	6020	0223 16:00	0224 01:14	BM

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0602382-04	<b>Date Collected:</b> 16-FEB-2006 13:05
MW-2 (1B)	<b>Date Received :</b> 17-FEB-2006
<b>Sample Matrix:</b> WATER	<b>Date Reported :</b> 24-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 2-Amber,1-Plastic,2-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Total Metals						
Antimony, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Arsenic, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Beryllium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Cadmium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Chromium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Copper, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Lead, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Mercury, Total	ND	mg/l	0.0002	1 7470A	0223 19:00 0224 11:58	DM
Nickel, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Selenium, Total	ND	mg/l	0.001	1 6020	0223 16:00 0224 01:20	BM
Silver, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Thallium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:20	BM
Zinc, Total	0.0079	mg/l	0.0050	1 6020	0223 16:00 0224 01:20	BM
Volatile Organics by GC/MS 8260				1 8260B	0222 16:45	PD
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	2.5			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
1,1-Dichloropropene	ND	ug/l	2.5			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Toluene	ND	ug/l	0.75			
Ethylbenzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-04  
MW-2 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 16:45 PD	
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-04  
MW-2 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1 8260B	0222 16:45 PD	
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	102	%	70-130			
Toluene-d8	99.0	%	70-130			
4-Bromofluorobenzene	108	%	70-130			
Dibromofluoromethane	99.0	%	70-130			
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 20:43 RL	
Acenaphthene	ND	ug/l	4.8			
Benidine	ND	ug/l	48.			
1,2,4-Trichlorobenzene	ND	ug/l	4.8			
Hexachlorobenzene	ND	ug/l	4.8			
Bis(2-chloroethyl)ether	ND	ug/l	4.8			
1-Chloronaphthalene	ND	ug/l	4.8			
2-Chloronaphthalene	ND	ug/l	5.8			
1,2-Dichlorobenzene	ND	ug/l	4.8			
1,3-Dichlorobenzene	ND	ug/l	4.8			
1,4-Dichlorobenzene	ND	ug/l	4.8			
3,3'-Dichlorobenzidine	ND	ug/l	48.			
2,4-Dinitrotoluene	ND	ug/l	5.8			
2,6-Dinitrotoluene	ND	ug/l	4.8			
Azobenzene	ND	ug/l	4.8			
Fluoranthene	ND	ug/l	4.8			
4-Chlorophenyl phenyl ether	ND	ug/l	4.8			
4-Bromophenyl phenyl ether	ND	ug/l	4.8			
Bis(2-chloroisopropyl)ether	ND	ug/l	4.8			
Bis(2-chloroethoxy)methane	ND	ug/l	4.8			
Hexachlorobutadiene	ND	ug/l	9.6			
Hexachlorocyclopentadiene	ND	ug/l	9.6			
Hexachloroethane	ND	ug/l	4.8			
Isophorone	ND	ug/l	4.8			
Naphthalene	ND	ug/l	4.8			
Nitrobenzene	ND	ug/l	4.8			
NDPA/DPA	ND	ug/l	14.			
n-Nitrosodi-n-propylamine	ND	ug/l	4.8			
Bis(2-ethylhexyl)phthalate	ND	ug/l	9.6			
Butyl benzyl phthalate	ND	ug/l	4.8			
Di-n-butylphthalate	ND	ug/l	4.8			
Di-n-octylphthalate	ND	ug/l	4.8			
Diethyl phthalate	ND	ug/l	4.8			
Dimethyl phthalate	ND	ug/l	4.8			
Benzo(a)anthracene	ND	ug/l	4.8			
Benzo(a)pyrene	ND	ug/l	4.8			
Benzo(b)fluoranthene	ND	ug/l	4.8			
Benzo(k)fluoranthene	ND	ug/l	4.8			
Chrysene	ND	ug/l	4.8			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-04  
MW-2 (1B)

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0220 12:00	0222 20:43	RL
Acenaphthylene	ND	ug/l	4.8					
Anthracene	ND	ug/l	4.8					
Benzo(ghi)perylene	ND	ug/l	4.8					
Fluorene	ND	ug/l	4.8					
Phenanthrene	ND	ug/l	4.8					
Dibenzo(a,h)anthracene	ND	ug/l	4.8					
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.7					
Pyrene	ND	ug/l	4.8					
Benzo(e)pyrene	ND	ug/l	4.8					
Biphenyl	ND	ug/l	4.8					
Perylene	ND	ug/l	4.8					
Aniline	ND	ug/l	9.6					
4-Chloroaniline	ND	ug/l	4.8					
1-Methylnaphthalene	ND	ug/l	4.8					
2-Nitroaniline	ND	ug/l	4.8					
3-Nitroaniline	ND	ug/l	4.8					
4-Nitroaniline	ND	ug/l	6.7					
Dibenzofuran	ND	ug/l	4.8					
a,a-Dimethylphenethylamine	ND	ug/l	48.					
Hexachloropropene	ND	ug/l	9.6					
Nitrosodi-n-butylamine	ND	ug/l	9.6					
2-Methylnaphthalene	ND	ug/l	4.8					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	19.					
Pentachlorobenzene	ND	ug/l	19.					
a-Naphthylamine	ND	ug/l	19.					
b-Naphthylamine	ND	ug/l	19.					
Phenacetin	ND	ug/l	9.6					
Dimethoate	ND	ug/l	19.					
4-Aminobiphenyl	ND	ug/l	9.6					
Pentachloronitrobenzene	ND	ug/l	9.6					
Isodrin	ND	ug/l	9.6					
p-Dimethylaminoazobenzene	ND	ug/l	9.6					
Chlorobenzilate	ND	ug/l	19.					
3-Methylcholanthrene	ND	ug/l	19.					
Ethyl Methanesulfonate	ND	ug/l	14.					
Acetophenone	ND	ug/l	19.					
Nitrosodipiperidine	ND	ug/l	19.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	9.6					
n-Nitrosodimethylamine	ND	ug/l	48.					
2,4,6-Trichlorophenol	ND	ug/l	4.8					
p-Chloro-m-cresol	ND	ug/l	4.8					
2-Chlorophenol	ND	ug/l	5.8					
2,4-Dichlorophenol	ND	ug/l	9.6					
2,4-Dimethylphenol	ND	ug/l	9.6					
2-Nitrophenol	ND	ug/l	19.					
4-Nitrophenol	ND	ug/l	9.6					
2,4-Dinitrophenol	ND	ug/l	19.					
4,6-Dinitro-o-cresol	ND	ug/l	19.					
Pentachlorophenol	ND	ug/l	19.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-04  
MW-2 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 20:43 RL	
Phenol	ND	ug/l	6.7			
2-Methylphenol	ND	ug/l	5.8			
3-Methylphenol/4-Methylphenol	ND	ug/l	5.8			
2,4,5-Trichlorophenol	ND	ug/l	4.8			
2,6-Dichlorophenol	ND	ug/l	9.6			
Benzoic Acid	ND	ug/l	48.			
Benzyl Alcohol	ND	ug/l	9.6			
Carbazole	ND	ug/l	4.8			
Pyridine	ND	ug/l	48.			
2-Picoline	ND	ug/l	19.			
Pronamide	ND	ug/l	19.			
Methyl methanesulfonate	ND	ug/l	19.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	47.0	%	21-120			
Phenol-d6	41.0	%	10-120			
Nitrobenzene-d5	86.0	%	23-120			
2-Fluorobiphenyl	62.0	%	43-120			
2,4,6-Tribromophenol	78.0	%	10-120			
4-Terphenyl-d14	88.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 22:02 RL	
Acenaphthene	ND	ug/l	0.19			
2-Chloronaphthalene	ND	ug/l	0.19			
Fluoranthene	ND	ug/l	0.19			
Hexachlorobutadiene	ND	ug/l	0.48			
Naphthalene	ND	ug/l	0.19			
Benzo(a)anthracene	ND	ug/l	0.19			
Benzo(a)pyrene	ND	ug/l	0.19			
Benzo(b)fluoranthene	ND	ug/l	0.19			
Benzo(k)fluoranthene	ND	ug/l	0.19			
Chrysene	ND	ug/l	0.19			
Acenaphthylene	ND	ug/l	0.19			
Anthracene	ND	ug/l	0.19			
Benzo(ghi)perylene	ND	ug/l	0.19			
Fluorene	ND	ug/l	0.19			
Phenanthrene	ND	ug/l	0.19			
Dibenzo(a,h)anthracene	ND	ug/l	0.19			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.19			
Pyrene	ND	ug/l	0.19			
1-Methylnaphthalene	ND	ug/l	0.19			
2-Methylnaphthalene	ND	ug/l	0.19			
Pentachlorophenol	ND	ug/l	0.77			
Hexachlorobenzene	ND	ug/l	0.77			
Perylene	ND	ug/l	0.19			
Biphenyl	ND	ug/l	0.19			
2,6-Dimethylnaphthalene	ND	ug/l	0.19			
1-Methylphenanthrene	ND	ug/l	0.19			
Benzo(e)Pyrene	ND	ug/l	0.19			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0602382-04  
MW-2 (1B)

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0220 12:00	0222 22:02 RL
Hexachloroethane	ND	ug/l	0.77				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	50.0	%	21-120				
Phenol-d6	40.0	%	10-120				
Nitrobenzene-d5	69.0	%	23-120				
2-Fluorobiphenyl	59.0	%	43-120				
2,4,6-Tribromophenol	74.0	%	10-120				
4-Terphenyl-d14	59.0	%	33-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-05 **Date Collected:** 14-FEB-2006 16:05  
**Sample Matrix:** TRIP BLANK-8260 **Date Received :** 17-FEB-2006  
WATER **Date Reported :** 24-FEB-2006  
**Condition of Sample:** Satisfactory **Field Prep:** None  
**Number & Type of Containers:** 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260				1	8260B	0222 17:22 PD	
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-05  
TRIP BLANK-8260

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 17:22 PD		
1,2,3-Trichloropropane	ND	ug/l	5.0					
Styrene	ND	ug/l	1.0					
Dichlorodifluoromethane	ND	ug/l	5.0					
Acetone	ND	ug/l	5.0					
Carbon disulfide	ND	ug/l	5.0					
2-Butanone	ND	ug/l	5.0					
Vinyl acetate	ND	ug/l	5.0					
4-Methyl-2-pentanone	ND	ug/l	5.0					
2-Hexanone	ND	ug/l	5.0					
Ethyl methacrylate	ND	ug/l	5.0					
Acrolein	ND	ug/l	12.					
Acrylonitrile	ND	ug/l	5.0					
Bromochloromethane	ND	ug/l	2.5					
Tetrahydrofuran	ND	ug/l	10.					
2,2-Dichloropropane	ND	ug/l	2.5					
1,2-Dibromoethane	ND	ug/l	2.0					
1,3-Dichloropropane	ND	ug/l	2.5					
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50					
Bromobenzene	ND	ug/l	2.5					
n-Butylbenzene	ND	ug/l	0.50					
sec-Butylbenzene	ND	ug/l	0.50					
tert-Butylbenzene	ND	ug/l	2.5					
o-Chlorotoluene	ND	ug/l	2.5					
p-Chlorotoluene	ND	ug/l	2.5					
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5					
Hexachlorobutadiene	ND	ug/l	0.60					
Isopropylbenzene	ND	ug/l	0.50					
p-Isopropyltoluene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	2.5					
n-Propylbenzene	ND	ug/l	0.50					
1,2,3-Trichlorobenzene	ND	ug/l	2.5					
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5					
Ethyl ether	ND	ug/l	2.5					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	97.0	%	70-130					
Toluene-d8	100	%	70-130					
4-Bromofluorobenzene	116	%	70-130					
Dibromofluoromethane	97.0	%	70-130					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-06 **Date Collected:** 16-FEB-2006 13:30  
**Sample Matrix:** T-1 COMPOSITE **Date Received :** 17-FEB-2006  
SOIL **Date Reported :** 24-FEB-2006  
**Condition of Sample:** Satisfactory **Field Prep:** None  
**Number & Type of Containers:** 1-Amber,1-Plastic

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	84	%	0.10	30 2540G			0220 14:52 PJ
Polychlorinated Biphenyls				1 8082	0220 15:45	0223 21:13	SS
Aroclor 1221	ND	ug/kg	39.7				
Aroclor 1232	ND	ug/kg	39.7				
Aroclor 1242/1016	ND	ug/kg	39.7				
Aroclor 1248	ND	ug/kg	39.7				
Aroclor 1254	ND	ug/kg	39.7				
Aroclor 1260	ND	ug/kg	39.7				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	77.0	%	30-150				
Decachlorobiphenyl	70.0	%	30-150				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-07  
**Sample Matrix:** TRENCH DRAIN  
SOIL  
**Condition of Sample:** Satisfactory  
**Number & Type of Containers:** 2-Amber,1-Plastic,3-Vial

**Date Collected:** 16-FEB-2006 14:00  
**Date Received :** 17-FEB-2006  
**Date Reported :** 24-FEB-2006  
**Field Prep:** None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Solids, Total	66	%	0.10	30 2540G	0220 14:52	PJ
Total Metals				1 3051		
Antimony, Total	ND	mg/kg	6.0	1 6010B	0222 18:00 0224 12:20	RW
Arsenic, Total	6.5	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Beryllium, Total	ND	mg/kg	0.60	1 6010B	0222 18:00 0224 12:20	RW
Cadmium, Total	2.0	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Chromium, Total	150	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Copper, Total	210	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Lead, Total	23	mg/kg	6.0	1 6010B	0222 18:00 0224 12:20	RW
Mercury, Total	ND	mg/kg	0.12	1 7471A	0221 21:00 0222 10:59	DM
Nickel, Total	79	mg/kg	3.0	1 6010B	0222 18:00 0224 12:20	RW
Selenium, Total	ND	mg/kg	2.4	1 6010B	0222 18:00 0224 12:20	RW
Silver, Total	ND	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Thallium, Total	ND	mg/kg	1.2	1 6010B	0222 18:00 0224 12:20	RW
Zinc, Total	160	mg/kg	6.0	1 6010B	0222 18:00 0224 12:20	RW
Volatile Organics 8260 via High 5035				1 8260B	0220 19:32	PD
Methylene chloride	ND	ug/kg	720			
1,1-Dichloroethane	ND	ug/kg	110			
Chloroform	ND	ug/kg	110			
Carbon tetrachloride	ND	ug/kg	72.			
1,2-Dichloropropane	ND	ug/kg	250			
Dibromochloromethane	ND	ug/kg	72.			
1,1,2-Trichloroethane	ND	ug/kg	110			
Tetrachloroethene	ND	ug/kg	72.			
Chlorobenzene	ND	ug/kg	72.			
Trichlorofluoromethane	ND	ug/kg	360			
1,2-Dichloroethane	ND	ug/kg	72.			
1,1,1-Trichloroethane	ND	ug/kg	72.			
Bromodichloromethane	ND	ug/kg	72.			
trans-1,3-Dichloropropene	ND	ug/kg	72.			
cis-1,3-Dichloropropene	ND	ug/kg	72.			
1,1-Dichloropropene	ND	ug/kg	360			
Bromoform	ND	ug/kg	290			
1,1,2,2-Tetrachloroethane	ND	ug/kg	72.			
Benzene	ND	ug/kg	72.			
Toluene	ND	ug/kg	110			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-07  
TRENCH DRAIN

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via High 5035 cont'd				1	8260B	0220 19:32 PD	
Ethylbenzene	ND	ug/kg	72.				
Chloromethane	ND	ug/kg	360				
Bromomethane	ND	ug/kg	140				
Vinyl chloride	ND	ug/kg	140				
Chloroethane	ND	ug/kg	140				
1,1-Dichloroethene	ND	ug/kg	72.				
trans-1,2-Dichloroethene	ND	ug/kg	110				
Trichloroethene	ND	ug/kg	72.				
1,2-Dichlorobenzene	ND	ug/kg	360				
1,3-Dichlorobenzene	ND	ug/kg	360				
1,4-Dichlorobenzene	ND	ug/kg	360				
Methyl tert butyl ether	ND	ug/kg	140				
p/m-Xylene	ND	ug/kg	140				
o-Xylene	ND	ug/kg	140				
cis-1,2-Dichloroethene	ND	ug/kg	72.				
Dibromomethane	ND	ug/kg	720				
1,4-Dichlorobutane	ND	ug/kg	720				
Iodomethane	ND	ug/kg	720				
1,2,3-Trichloropropane	ND	ug/kg	720				
Styrene	ND	ug/kg	140				
Dichlorodifluoromethane	ND	ug/kg	720				
Acetone	ND	ug/kg	720				
Carbon disulfide	ND	ug/kg	720				
2-Butanone	ND	ug/kg	720				
Vinyl acetate	ND	ug/kg	720				
4-Methyl-2-pentanone	ND	ug/kg	720				
2-Hexanone	ND	ug/kg	720				
Ethyl methacrylate	ND	ug/kg	720				
Acrolein	ND	ug/kg	1800				
Acrylonitrile	ND	ug/kg	720				
Bromochloromethane	ND	ug/kg	360				
Tetrahydrofuran	ND	ug/kg	1400				
2,2-Dichloropropane	ND	ug/kg	360				
1,2-Dibromoethane	ND	ug/kg	290				
1,3-Dichloropropane	ND	ug/kg	360				
1,1,1,2-Tetrachloroethane	ND	ug/kg	72.				
Bromobenzene	ND	ug/kg	360				
n-Butylbenzene	ND	ug/kg	72.				
sec-Butylbenzene	ND	ug/kg	72.				
tert-Butylbenzene	ND	ug/kg	360				
o-Chlorotoluene	ND	ug/kg	360				
p-Chlorotoluene	ND	ug/kg	360				
1,2-Dibromo-3-chloropropane	ND	ug/kg	360				
Hexachlorobutadiene	ND	ug/kg	360				
Isopropylbenzene	ND	ug/kg	72.				
p-Isopropyltoluene	ND	ug/kg	72.				
Naphthalene	ND	ug/kg	360				
n-Propylbenzene	ND	ug/kg	72.				
1,2,3-Trichlorobenzene	ND	ug/kg	360				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-07  
TRENCH DRAIN

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics 8260 via High 5035 cont'd				1 8260B	0220 19:32 PD	
1,2,4-Trichlorobenzene	ND	ug/kg	360			
1,3,5-Trimethylbenzene	ND	ug/kg	360			
1,2,4-Trimethylbenzene	ND	ug/kg	360			
trans-1,4-Dichloro-2-butene	ND	ug/kg	360			
Ethyl ether	ND	ug/kg	360			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	93.0	%	70-130			
Toluene-d8	93.0	%	70-130			
4-Bromofluorobenzene	104	%	70-130			
Dibromofluoromethane	93.0	%	70-130			
Polychlorinated Biphenyls				1 8082	0220 15:45 0223 21:41 SS	
Aroclor 1221	ND	ug/kg	101.			
Aroclor 1232	ND	ug/kg	101.			
Aroclor 1242/1016	ND	ug/kg	101.			
Aroclor 1248	ND	ug/kg	101.			
Aroclor 1254	ND	ug/kg	101.			
Aroclor 1260	ND	ug/kg	101.			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	78.0	%	30-150			
Decachlorobiphenyl	75.0	%	30-150			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-08

**Date Collected:** 14-FEB-2006 18:10

TRIP BLANKS

**Date Received :** 17-FEB-2006

**Sample Matrix:** SOIL

**Date Reported :** 24-FEB-2006

**Condition of Sample:** Satisfactory

**Field Prep:** None

**Number & Type of Containers:** 2-Vial

**Comments:**

Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via High 5035				1	8260B	0220 23:06 PD	
Methylene chloride	ND	ug/kg	500				
1,1-Dichloroethane	ND	ug/kg	75.				
Chloroform	ND	ug/kg	75.				
Carbon tetrachloride	ND	ug/kg	50.				
1,2-Dichloropropane	ND	ug/kg	180				
Dibromochloromethane	ND	ug/kg	50.				
1,1,2-Trichloroethane	ND	ug/kg	75.				
Tetrachloroethene	ND	ug/kg	50.				
Chlorobenzene	ND	ug/kg	50.				
Trichlorofluoromethane	ND	ug/kg	250				
1,2-Dichloroethane	ND	ug/kg	50.				
1,1,1-Trichloroethane	ND	ug/kg	50.				
Bromodichloromethane	ND	ug/kg	50.				
trans-1,3-Dichloropropene	ND	ug/kg	50.				
cis-1,3-Dichloropropene	ND	ug/kg	50.				
1,1-Dichloropropene	ND	ug/kg	250				
Bromoform	ND	ug/kg	200				
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.				
Benzene	ND	ug/kg	50.				
Toluene	ND	ug/kg	75.				
Ethylbenzene	ND	ug/kg	50.				
Chloromethane	ND	ug/kg	250				
Bromomethane	ND	ug/kg	100				
Vinyl chloride	ND	ug/kg	100				
Chloroethane	ND	ug/kg	100				
1,1-Dichloroethene	ND	ug/kg	50.				
trans-1,2-Dichloroethene	ND	ug/kg	75.				
Trichloroethene	ND	ug/kg	50.				
1,2-Dichlorobenzene	ND	ug/kg	250				
1,3-Dichlorobenzene	ND	ug/kg	250				
1,4-Dichlorobenzene	ND	ug/kg	250				
Methyl tert butyl ether	ND	ug/kg	100				
p/m-Xylene	ND	ug/kg	100				
o-Xylene	ND	ug/kg	100				
cis-1,2-Dichloroethene	ND	ug/kg	50.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-08  
TRIP BLANKS

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
Volatile Organics 8260 via High 5035 cont'd				1	8260B	0220 23:06 PD		
Dibromomethane	ND	ug/kg	500					
1,4-Dichlorobutane	ND	ug/kg	500					
Iodomethane	ND	ug/kg	500					
1,2,3-Trichloropropane	ND	ug/kg	500					
Styrene	ND	ug/kg	100					
Dichlorodifluoromethane	ND	ug/kg	500					
Acetone	ND	ug/kg	500					
Carbon disulfide	ND	ug/kg	500					
2-Butanone	ND	ug/kg	500					
Vinyl acetate	ND	ug/kg	500					
4-Methyl-2-pentanone	ND	ug/kg	500					
2-Hexanone	ND	ug/kg	500					
Ethyl methacrylate	ND	ug/kg	500					
Acrolein	ND	ug/kg	1200					
Acrylonitrile	ND	ug/kg	500					
Bromochloromethane	ND	ug/kg	250					
Tetrahydrofuran	ND	ug/kg	1000					
2,2-Dichloropropane	ND	ug/kg	250					
1,2-Dibromoethane	ND	ug/kg	200					
1,3-Dichloropropane	ND	ug/kg	250					
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.					
Bromobenzene	ND	ug/kg	250					
n-Butylbenzene	ND	ug/kg	50.					
sec-Butylbenzene	ND	ug/kg	50.					
tert-Butylbenzene	ND	ug/kg	250					
o-Chlorotoluene	ND	ug/kg	250					
p-Chlorotoluene	ND	ug/kg	250					
1,2-Dibromo-3-chloropropane	ND	ug/kg	250					
Hexachlorobutadiene	ND	ug/kg	250					
Isopropylbenzene	ND	ug/kg	50.					
p-Isopropyltoluene	ND	ug/kg	50.					
Naphthalene	ND	ug/kg	250					
n-Propylbenzene	ND	ug/kg	50.					
1,2,3-Trichlorobenzene	ND	ug/kg	250					
1,2,4-Trichlorobenzene	ND	ug/kg	250					
1,3,5-Trimethylbenzene	ND	ug/kg	250					
1,2,4-Trimethylbenzene	ND	ug/kg	250					
trans-1,4-Dichloro-2-butene	ND	ug/kg	250					
Ethyl ether	ND	ug/kg	250					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	94.0	%	70-130					
Toluene-d8	94.0	%	70-130					
4-Bromofluorobenzene	103	%	70-130					
Dibromofluoromethane	91.0	%	70-130					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0602382-09	<b>Date Collected:</b> 14-FEB-2006 14:30
	<b>Date Received :</b> 17-FEB-2006
<b>Sample Matrix:</b> SW-2 WATER	<b>Date Reported :</b> 24-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 2-Amber,1-Plastic,2-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Total Metals						
Antimony, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Arsenic, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Beryllium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Cadmium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Chromium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Copper, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Lead, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Mercury, Total	ND	mg/l	0.0002	1 7470A	0223 19:00 0224 12:00	DM
Nickel, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Selenium, Total	ND	mg/l	0.001	1 6020	0223 16:00 0224 01:26	BM
Silver, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Thallium, Total	ND	mg/l	0.0005	1 6020	0223 16:00 0224 01:26	BM
Zinc, Total	ND	mg/l	0.0050	1 6020	0223 16:00 0224 01:26	BM
Volatile Organics by GC/MS 8260				1 8260B	0222 17:57	PD
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	2.5			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
1,1-Dichloropropene	ND	ug/l	2.5			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Toluene	ND	ug/l	0.75			
Ethylbenzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-09  
SW-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 17:57 PD	
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-09  
SW-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1 8260B	0222 17:57 PD	
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	103	%	70-130			
Toluene-d8	100	%	70-130			
4-Bromofluorobenzene	119	%	70-130			
Dibromofluoromethane	102	%	70-130			
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 21:08 RL	
Acenaphthene	ND	ug/l	4.8			
Benidine	ND	ug/l	48.			
1,2,4-Trichlorobenzene	ND	ug/l	4.8			
Hexachlorobenzene	ND	ug/l	4.8			
Bis(2-chloroethyl)ether	ND	ug/l	4.8			
1-Chloronaphthalene	ND	ug/l	4.8			
2-Chloronaphthalene	ND	ug/l	5.8			
1,2-Dichlorobenzene	ND	ug/l	4.8			
1,3-Dichlorobenzene	ND	ug/l	4.8			
1,4-Dichlorobenzene	ND	ug/l	4.8			
3,3'-Dichlorobenzidine	ND	ug/l	48.			
2,4-Dinitrotoluene	ND	ug/l	5.8			
2,6-Dinitrotoluene	ND	ug/l	4.8			
Azobenzene	ND	ug/l	4.8			
Fluoranthene	ND	ug/l	4.8			
4-Chlorophenyl phenyl ether	ND	ug/l	4.8			
4-Bromophenyl phenyl ether	ND	ug/l	4.8			
Bis(2-chloroisopropyl)ether	ND	ug/l	4.8			
Bis(2-chloroethoxy)methane	ND	ug/l	4.8			
Hexachlorobutadiene	ND	ug/l	9.7			
Hexachlorocyclopentadiene	ND	ug/l	9.7			
Hexachloroethane	ND	ug/l	4.8			
Isophorone	ND	ug/l	4.8			
Naphthalene	ND	ug/l	4.8			
Nitrobenzene	ND	ug/l	4.8			
NDPA/DPA	ND	ug/l	14.			
n-Nitrosodi-n-propylamine	ND	ug/l	4.8			
Bis(2-ethylhexyl)phthalate	ND	ug/l	9.7			
Butyl benzyl phthalate	ND	ug/l	4.8			
Di-n-butylphthalate	ND	ug/l	4.8			
Di-n-octylphthalate	ND	ug/l	4.8			
Diethyl phthalate	ND	ug/l	4.8			
Dimethyl phthalate	ND	ug/l	4.8			
Benzo(a)anthracene	ND	ug/l	4.8			
Benzo(a)pyrene	ND	ug/l	4.8			
Benzo(b)fluoranthene	ND	ug/l	4.8			
Benzo(k)fluoranthene	ND	ug/l	4.8			
Chrysene	ND	ug/l	4.8			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-09  
SW-2

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0220 12:00	0222 21:08	RL
Acenaphthylene	ND	ug/l	4.8					
Anthracene	ND	ug/l	4.8					
Benzo(ghi)perylene	ND	ug/l	4.8					
Fluorene	ND	ug/l	4.8					
Phenanthrene	ND	ug/l	4.8					
Dibenzo(a,h)anthracene	ND	ug/l	4.8					
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.8					
Pyrene	ND	ug/l	4.8					
Benzo(e)pyrene	ND	ug/l	4.8					
Biphenyl	ND	ug/l	4.8					
Perylene	ND	ug/l	4.8					
Aniline	ND	ug/l	9.7					
4-Chloroaniline	ND	ug/l	4.8					
1-Methylnaphthalene	ND	ug/l	4.8					
2-Nitroaniline	ND	ug/l	4.8					
3-Nitroaniline	ND	ug/l	4.8					
4-Nitroaniline	ND	ug/l	6.8					
Dibenzofuran	ND	ug/l	4.8					
a,a-Dimethylphenethylamine	ND	ug/l	48.					
Hexachloropropene	ND	ug/l	9.7					
Nitrosodi-n-butylamine	ND	ug/l	9.7					
2-Methylnaphthalene	ND	ug/l	4.8					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	19.					
Pentachlorobenzene	ND	ug/l	19.					
a-Naphthylamine	ND	ug/l	19.					
b-Naphthylamine	ND	ug/l	19.					
Phenacetin	ND	ug/l	9.7					
Dimethoate	ND	ug/l	19.					
4-Aminobiphenyl	ND	ug/l	9.7					
Pentachloronitrobenzene	ND	ug/l	9.7					
Isodrin	ND	ug/l	9.7					
p-Dimethylaminoazobenzene	ND	ug/l	9.7					
Chlorobenzilate	ND	ug/l	19.					
3-Methylcholanthrene	ND	ug/l	19.					
Ethyl Methanesulfonate	ND	ug/l	14.					
Acetophenone	ND	ug/l	19.					
Nitrosodipiperidine	ND	ug/l	19.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	9.7					
n-Nitrosodimethylamine	ND	ug/l	48.					
2,4,6-Trichlorophenol	ND	ug/l	4.8					
p-Chloro-m-cresol	ND	ug/l	4.8					
2-Chlorophenol	ND	ug/l	5.8					
2,4-Dichlorophenol	ND	ug/l	9.7					
2,4-Dimethylphenol	ND	ug/l	9.7					
2-Nitrophenol	ND	ug/l	19.					
4-Nitrophenol	ND	ug/l	9.7					
2,4-Dinitrophenol	ND	ug/l	19.					
4,6-Dinitro-o-cresol	ND	ug/l	19.					
Pentachlorophenol	ND	ug/l	19.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-09  
SW-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 21:08 RL	
Phenol	ND	ug/l	6.8			
2-Methylphenol	ND	ug/l	5.8			
3-Methylphenol/4-Methylphenol	ND	ug/l	5.8			
2,4,5-Trichlorophenol	ND	ug/l	4.8			
2,6-Dichlorophenol	ND	ug/l	9.7			
Benzoic Acid	ND	ug/l	48.			
Benzyl Alcohol	ND	ug/l	9.7			
Carbazole	ND	ug/l	4.8			
Pyridine	ND	ug/l	48.			
2-Picoline	ND	ug/l	19.			
Pronamide	ND	ug/l	19.			
Methyl methanesulfonate	ND	ug/l	19.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	48.0	%	21-120			
Phenol-d6	44.0	%	10-120			
Nitrobenzene-d5	89.0	%	23-120			
2-Fluorobiphenyl	65.0	%	43-120			
2,4,6-Tribromophenol	83.0	%	10-120			
4-Terphenyl-d14	95.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 22:46 RL	
Acenaphthene	ND	ug/l	0.19			
2-Chloronaphthalene	ND	ug/l	0.19			
Fluoranthene	ND	ug/l	0.19			
Hexachlorobutadiene	ND	ug/l	0.48			
Naphthalene	ND	ug/l	0.19			
Benzo(a)anthracene	ND	ug/l	0.19			
Benzo(a)pyrene	ND	ug/l	0.19			
Benzo(b)fluoranthene	ND	ug/l	0.19			
Benzo(k)fluoranthene	ND	ug/l	0.19			
Chrysene	ND	ug/l	0.19			
Acenaphthylene	ND	ug/l	0.19			
Anthracene	ND	ug/l	0.19			
Benzo(ghi)perylene	ND	ug/l	0.19			
Fluorene	ND	ug/l	0.19			
Phenanthrene	ND	ug/l	0.19			
Dibenzo(a,h)anthracene	ND	ug/l	0.19			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.19			
Pyrene	ND	ug/l	0.19			
1-Methylnaphthalene	ND	ug/l	0.19			
2-Methylnaphthalene	ND	ug/l	0.19			
Pentachlorophenol	ND	ug/l	0.78			
Hexachlorobenzene	ND	ug/l	0.78			
Perylene	ND	ug/l	0.19			
Biphenyl	ND	ug/l	0.19			
2,6-Dimethylnaphthalene	ND	ug/l	0.19			
1-Methylphenanthrene	ND	ug/l	0.19			
Benzo(e)Pyrene	ND	ug/l	0.19			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0602382-09  
SW-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0220 12:00	0222 22:46 RL
Hexachloroethane	ND	ug/l	0.78				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	50.0	%	21-120				
Phenol-d6	39.0	%	10-120				
Nitrobenzene-d5	67.0	%	23-120				
2-Fluorobiphenyl	57.0	%	43-120				
2,4,6-Tribromophenol	71.0	%	10-120				
4-Terphenyl-d14	61.0	%	33-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-10  
**Sample Matrix:** SW-1  
WATER  
**Condition of Sample:** Satisfactory  
**Number & Type of Containers:** 2-Amber,1-Plastic,2-Vial

**Date Collected:** 14-FEB-2006 14:45  
**Date Received :** 17-FEB-2006  
**Date Reported :** 24-FEB-2006  
**Field Prep:** None

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Beryllium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Cadmium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Chromium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Copper, Total	0.0006	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Lead, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Mercury, Total	ND	mg/l	0.0002	1	7470A	0223 19:00	0224 12:01	DM
Nickel, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0223 16:00	0224 01:31	BM
Silver, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Thallium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 01:31	BM
Zinc, Total	0.0120	mg/l	0.0050	1	6020	0223 16:00	0224 01:31	BM
Volatile Organics by GC/MS 8260				1	8260B	0222 18:33 PD		
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	ND	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-10  
SW-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 18:33 PD	
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-10  
SW-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
<hr/>						
Volatile Organics by GC/MS 8260 cont'd				1 8260B	0222 18:33	PD
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	103	%	70-130			
Toluene-d8	102	%	70-130			
4-Bromofluorobenzene	122	%	70-130			
Dibromofluoromethane	104	%	70-130			
<hr/>						
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 21:33	RL
Acenaphthene	ND	ug/l	5.0			
Benidine	ND	ug/l	50.			
1,2,4-Trichlorobenzene	ND	ug/l	5.0			
Hexachlorobenzene	ND	ug/l	5.0			
Bis(2-chloroethyl)ether	ND	ug/l	5.0			
1-Chloronaphthalene	ND	ug/l	5.0			
2-Chloronaphthalene	ND	ug/l	6.0			
1,2-Dichlorobenzene	ND	ug/l	5.0			
1,3-Dichlorobenzene	ND	ug/l	5.0			
1,4-Dichlorobenzene	ND	ug/l	5.0			
3,3'-Dichlorobenzidine	ND	ug/l	50.			
2,4-Dinitrotoluene	ND	ug/l	6.0			
2,6-Dinitrotoluene	ND	ug/l	5.0			
Azobenzene	ND	ug/l	5.0			
Fluoranthene	ND	ug/l	5.0			
4-Chlorophenyl phenyl ether	ND	ug/l	5.0			
4-Bromophenyl phenyl ether	ND	ug/l	5.0			
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0			
Bis(2-chloroethoxy)methane	ND	ug/l	5.0			
Hexachlorobutadiene	ND	ug/l	10.			
Hexachlorocyclopentadiene	ND	ug/l	10.			
Hexachloroethane	ND	ug/l	5.0			
Isophorone	ND	ug/l	5.0			
Naphthalene	ND	ug/l	5.0			
Nitrobenzene	ND	ug/l	5.0			
NDPA/DPA	ND	ug/l	15.			
n-Nitrosodi-n-propylamine	ND	ug/l	5.0			
Bis(2-ethylhexyl)phthalate	ND	ug/l	10.			
Butyl benzyl phthalate	ND	ug/l	5.0			
Di-n-butylphthalate	ND	ug/l	5.0			
Di-n-octylphthalate	ND	ug/l	5.0			
Diethyl phthalate	ND	ug/l	5.0			
Dimethyl phthalate	ND	ug/l	5.0			
Benzo(a)anthracene	ND	ug/l	5.0			
Benzo(a)pyrene	ND	ug/l	5.0			
Benzo(b)fluoranthene	ND	ug/l	5.0			
Benzo(k)fluoranthene	ND	ug/l	5.0			
Chrysene	ND	ug/l	5.0			

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-10  
SW-1

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0220 12:00	0222 21:33	RL
Acenaphthylene	ND	ug/l	5.0					
Anthracene	ND	ug/l	5.0					
Benzo(ghi)perylene	ND	ug/l	5.0					
Fluorene	ND	ug/l	5.0					
Phenanthrene	ND	ug/l	5.0					
Dibenzo(a,h)anthracene	ND	ug/l	5.0					
Indeno(1,2,3-cd)pyrene	ND	ug/l	7.0					
Pyrene	ND	ug/l	5.0					
Benzo(e)pyrene	ND	ug/l	5.0					
Biphenyl	ND	ug/l	5.0					
Perylene	ND	ug/l	5.0					
Aniline	ND	ug/l	10.					
4-Chloroaniline	ND	ug/l	5.0					
1-Methylnaphthalene	ND	ug/l	5.0					
2-Nitroaniline	ND	ug/l	5.0					
3-Nitroaniline	ND	ug/l	5.0					
4-Nitroaniline	ND	ug/l	7.0					
Dibenzofuran	ND	ug/l	5.0					
a,a-Dimethylphenethylamine	ND	ug/l	50.					
Hexachloropropene	ND	ug/l	10.					
Nitrosodi-n-butylamine	ND	ug/l	10.					
2-Methylnaphthalene	ND	ug/l	5.0					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.					
Pentachlorobenzene	ND	ug/l	20.					
a-Naphthylamine	ND	ug/l	20.					
b-Naphthylamine	ND	ug/l	20.					
Phenacetin	ND	ug/l	10.					
Dimethoate	ND	ug/l	20.					
4-Aminobiphenyl	ND	ug/l	10.					
Pentachloronitrobenzene	ND	ug/l	10.					
Isodrin	ND	ug/l	10.					
p-Dimethylaminoazobenzene	ND	ug/l	10.					
Chlorobenzilate	ND	ug/l	20.					
3-Methylcholanthrene	ND	ug/l	20.					
Ethyl Methanesulfonate	ND	ug/l	15.					
Acetophenone	ND	ug/l	20.					
Nitrosodipiperidine	ND	ug/l	20.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	10.					
n-Nitrosodimethylamine	ND	ug/l	50.					
2,4,6-Trichlorophenol	ND	ug/l	5.0					
p-Chloro-m-cresol	ND	ug/l	5.0					
2-Chlorophenol	ND	ug/l	6.0					
2,4-Dichlorophenol	ND	ug/l	10.					
2,4-Dimethylphenol	ND	ug/l	10.					
2-Nitrophenol	ND	ug/l	20.					
4-Nitrophenol	ND	ug/l	10.					
2,4-Dinitrophenol	ND	ug/l	20.					
4,6-Dinitro-o-cresol	ND	ug/l	20.					
Pentachlorophenol	ND	ug/l	20.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-10  
SW-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 21:33	RL
Phenol	ND	ug/l	7.0			
2-Methylphenol	ND	ug/l	6.0			
3-Methylphenol/4-Methylphenol	ND	ug/l	6.0			
2,4,5-Trichlorophenol	ND	ug/l	5.0			
2,6-Dichlorophenol	ND	ug/l	10.			
Benzoic Acid	ND	ug/l	50.			
Benzyl Alcohol	ND	ug/l	10.			
Carbazole	ND	ug/l	5.0			
Pyridine	ND	ug/l	50.			
2-Picoline	ND	ug/l	20.			
Pronamide	ND	ug/l	20.			
Methyl methanesulfonate	ND	ug/l	20.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	42.0	%	21-120			
Phenol-d6	41.0	%	10-120			
Nitrobenzene-d5	76.0	%	23-120			
2-Fluorobiphenyl	55.0	%	43-120			
2,4,6-Tribromophenol	70.0	%	10-120			
4-Terphenyl-d14	86.0	%	33-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 23:31	RL
Acenaphthene	ND	ug/l	0.20			
2-Chloronaphthalene	ND	ug/l	0.20			
Fluoranthene	ND	ug/l	0.20			
Hexachlorobutadiene	ND	ug/l	0.50			
Naphthalene	ND	ug/l	0.20			
Benzo(a)anthracene	ND	ug/l	0.20			
Benzo(a)pyrene	ND	ug/l	0.20			
Benzo(b)fluoranthene	ND	ug/l	0.20			
Benzo(k)fluoranthene	ND	ug/l	0.20			
Chrysene	ND	ug/l	0.20			
Acenaphthylene	ND	ug/l	0.20			
Anthracene	ND	ug/l	0.20			
Benzo(ghi)perylene	ND	ug/l	0.20			
Fluorene	ND	ug/l	0.20			
Phenanthrene	ND	ug/l	0.20			
Dibenzo(a,h)anthracene	ND	ug/l	0.20			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20			
Pyrene	ND	ug/l	0.20			
1-Methylnaphthalene	ND	ug/l	0.20			
2-Methylnaphthalene	ND	ug/l	0.20			
Pentachlorophenol	ND	ug/l	0.80			
Hexachlorobenzene	ND	ug/l	0.80			
Perylene	ND	ug/l	0.20			
Biphenyl	ND	ug/l	0.20			
2,6-Dimethylnaphthalene	ND	ug/l	0.20			
1-Methylphenanthrene	ND	ug/l	0.20			
Benzo(e)Pyrene	ND	ug/l	0.20			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0602382-10  
SW-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0220 12:00	0222 23:31 RL
Hexachloroethane	ND	ug/l	0.80				
Surrogate(s)	Recovery		QC Criteria				
2-Fluorophenol	42.0	%	21-120				
Phenol-d6	34.0	%	10-120				
Nitrobenzene-d5	55.0	%	23-120				
2-Fluorobiphenyl	44.0	%	43-120				
2,4,6-Tribromophenol	54.0	%	10-120				
4-Terphenyl-d14	55.0	%	33-120				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-11  
SED-4  
**Sample Matrix:** SOIL  
**Condition of Sample:** Satisfactory  
**Number & Type of Containers:** 2-Amber,1-Plastic,3-Vial

**Date Collected:** 16-FEB-2006 15:00  
**Date Received :** 17-FEB-2006  
**Date Reported :** 24-FEB-2006  
**Field Prep:** None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Solids, Total	74	%	0.10	30 2540G	0220 14:52	PJ
Total Metals				1 3051		
Antimony, Total	ND	mg/kg	2.7	1 6010B	0222 18:00 0223 15:10	RW
Arsenic, Total	4.7	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Beryllium, Total	ND	mg/kg	0.27	1 6010B	0222 18:00 0223 15:10	RW
Cadmium, Total	ND	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Chromium, Total	4.4	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Copper, Total	9.9	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Lead, Total	10	mg/kg	2.7	1 6010B	0222 18:00 0223 15:10	RW
Mercury, Total	ND	mg/kg	0.10	1 7471A	0221 21:00 0222 11:04	DM
Nickel, Total	6.7	mg/kg	1.3	1 6010B	0222 18:00 0223 15:10	RW
Selenium, Total	ND	mg/kg	1.1	1 6010B	0222 18:00 0223 15:10	RW
Silver, Total	ND	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Thallium, Total	0.55	mg/kg	0.54	1 6010B	0222 18:00 0223 15:10	RW
Zinc, Total	30	mg/kg	2.7	1 6010B	0222 18:00 0223 15:10	RW
Volatile Organics 8260 via High 5035				1 8260B	0220 20:58	PD
Methylene chloride	ND	ug/kg	590			
1,1-Dichloroethane	ND	ug/kg	88.			
Chloroform	ND	ug/kg	88.			
Carbon tetrachloride	ND	ug/kg	59.			
1,2-Dichloropropane	ND	ug/kg	210			
Dibromochloromethane	ND	ug/kg	59.			
1,1,2-Trichloroethane	ND	ug/kg	88.			
Tetrachloroethene	ND	ug/kg	59.			
Chlorobenzene	ND	ug/kg	59.			
Trichlorofluoromethane	ND	ug/kg	290			
1,2-Dichloroethane	ND	ug/kg	59.			
1,1,1-Trichloroethane	ND	ug/kg	59.			
Bromodichloromethane	ND	ug/kg	59.			
trans-1,3-Dichloropropene	ND	ug/kg	59.			
cis-1,3-Dichloropropene	ND	ug/kg	59.			
1,1-Dichloropropene	ND	ug/kg	290			
Bromoform	ND	ug/kg	240			
1,1,2,2-Tetrachloroethane	ND	ug/kg	59.			
Benzene	ND	ug/kg	59.			
Toluene	ND	ug/kg	88.			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-11  
SED-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via High 5035 cont'd				1	8260B	0220 20:58 PD	
Ethylbenzene	ND	ug/kg	59.				
Chloromethane	ND	ug/kg	290				
Bromomethane	ND	ug/kg	120				
Vinyl chloride	ND	ug/kg	120				
Chloroethane	ND	ug/kg	120				
1,1-Dichloroethene	ND	ug/kg	59.				
trans-1,2-Dichloroethene	ND	ug/kg	88.				
Trichloroethene	ND	ug/kg	59.				
1,2-Dichlorobenzene	ND	ug/kg	290				
1,3-Dichlorobenzene	ND	ug/kg	290				
1,4-Dichlorobenzene	ND	ug/kg	290				
Methyl tert butyl ether	ND	ug/kg	120				
p/m-Xylene	ND	ug/kg	120				
o-Xylene	ND	ug/kg	120				
cis-1,2-Dichloroethene	ND	ug/kg	59.				
Dibromomethane	ND	ug/kg	590				
1,4-Dichlorobutane	ND	ug/kg	590				
Iodomethane	ND	ug/kg	590				
1,2,3-Trichloropropane	ND	ug/kg	590				
Styrene	ND	ug/kg	120				
Dichlorodifluoromethane	ND	ug/kg	590				
Acetone	ND	ug/kg	590				
Carbon disulfide	ND	ug/kg	590				
2-Butanone	ND	ug/kg	590				
Vinyl acetate	ND	ug/kg	590				
4-Methyl-2-pentanone	ND	ug/kg	590				
2-Hexanone	ND	ug/kg	590				
Ethyl methacrylate	ND	ug/kg	590				
Acrolein	ND	ug/kg	1500				
Acrylonitrile	ND	ug/kg	590				
Bromochloromethane	ND	ug/kg	290				
Tetrahydrofuran	ND	ug/kg	1200				
2,2-Dichloropropane	ND	ug/kg	290				
1,2-Dibromoethane	ND	ug/kg	240				
1,3-Dichloropropane	ND	ug/kg	290				
1,1,1,2-Tetrachloroethane	ND	ug/kg	59.				
Bromobenzene	ND	ug/kg	290				
n-Butylbenzene	ND	ug/kg	59.				
sec-Butylbenzene	ND	ug/kg	59.				
tert-Butylbenzene	ND	ug/kg	290				
o-Chlorotoluene	ND	ug/kg	290				
p-Chlorotoluene	ND	ug/kg	290				
1,2-Dibromo-3-chloropropane	ND	ug/kg	290				
Hexachlorobutadiene	ND	ug/kg	290				
Isopropylbenzene	ND	ug/kg	59.				
p-Isopropyltoluene	ND	ug/kg	59.				
Naphthalene	ND	ug/kg	290				
n-Propylbenzene	ND	ug/kg	59.				
1,2,3-Trichlorobenzene	ND	ug/kg	290				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-11  
SED-4

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
<hr/>						
Volatile Organics 8260 via High 5035 cont'd				1 8260B	0220 20:58 PD	
1,2,4-Trichlorobenzene	ND	ug/kg	290			
1,3,5-Trimethylbenzene	ND	ug/kg	290			
1,2,4-Trimethylbenzene	ND	ug/kg	290			
trans-1,4-Dichloro-2-butene	ND	ug/kg	290			
Ethyl ether	ND	ug/kg	290			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	93.0	%	70-130			
Toluene-d8	95.0	%	70-130			
4-Bromofluorobenzene	103	%	70-130			
Dibromofluoromethane	91.0	%	70-130			
<hr/>						
Polychlorinated Biphenyls				1 8082	0220 15:45 0223 22:10 SS	
Aroclor 1221	ND	ug/kg	45.0			
Aroclor 1232	ND	ug/kg	45.0			
Aroclor 1242/1016	ND	ug/kg	45.0			
Aroclor 1248	ND	ug/kg	45.0			
Aroclor 1254	ND	ug/kg	45.0			
Aroclor 1260	ND	ug/kg	45.0			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	68.0	%	30-150			
Decachlorobiphenyl	65.0	%	30-150			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0602382-12  
SED-3  
**Sample Matrix:** SOIL

**Date Collected:** 16-FEB-2006 15:15  
**Date Received :** 17-FEB-2006  
**Date Reported :** 24-FEB-2006

**Condition of Sample:** Satisfactory  
**Field Prep:** None

**Number & Type of Containers:** 2-Amber,1-Plastic,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Solids, Total	64	%	0.10	30 2540G	0220 14:52	PJ
Total Metals				1 3051		
Antimony, Total	ND	mg/kg	3.1	1 6010B	0222 18:00 0223 15:12	RW
Arsenic, Total	3.1	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Beryllium, Total	ND	mg/kg	0.31	1 6010B	0222 18:00 0223 15:12	RW
Cadmium, Total	ND	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Chromium, Total	6.2	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Copper, Total	6.9	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Lead, Total	10	mg/kg	3.1	1 6010B	0222 18:00 0223 15:12	RW
Mercury, Total	ND	mg/kg	0.12	1 7471A	0221 21:00 0222 11:06	DM
Nickel, Total	4.6	mg/kg	1.6	1 6010B	0222 18:00 0223 15:12	RW
Selenium, Total	ND	mg/kg	1.2	1 6010B	0222 18:00 0223 15:12	RW
Silver, Total	ND	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Thallium, Total	ND	mg/kg	0.62	1 6010B	0222 18:00 0223 15:12	RW
Zinc, Total	59	mg/kg	3.1	1 6010B	0222 18:00 0223 15:12	RW
Volatile Organics 8260 via High 5035				1 8260B	0220 21:41	PD
Methylene chloride	ND	ug/kg	690			
1,1-Dichloroethane	ND	ug/kg	100			
Chloroform	ND	ug/kg	100			
Carbon tetrachloride	ND	ug/kg	69.			
1,2-Dichloropropane	ND	ug/kg	240			
Dibromochloromethane	ND	ug/kg	69.			
1,1,2-Trichloroethane	ND	ug/kg	100			
Tetrachloroethene	ND	ug/kg	69.			
Chlorobenzene	ND	ug/kg	69.			
Trichlorofluoromethane	ND	ug/kg	350			
1,2-Dichloroethane	ND	ug/kg	69.			
1,1,1-Trichloroethane	ND	ug/kg	69.			
Bromodichloromethane	ND	ug/kg	69.			
trans-1,3-Dichloropropene	ND	ug/kg	69.			
cis-1,3-Dichloropropene	ND	ug/kg	69.			
1,1-Dichloropropene	ND	ug/kg	350			
Bromoform	ND	ug/kg	280			
1,1,2,2-Tetrachloroethane	ND	ug/kg	69.			
Benzene	ND	ug/kg	69.			
Toluene	ND	ug/kg	100			

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-12  
SED-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via High 5035 cont'd				1	8260B	0220 21:41	PD
Ethylbenzene	ND	ug/kg	69.				
Chloromethane	ND	ug/kg	350				
Bromomethane	ND	ug/kg	140				
Vinyl chloride	ND	ug/kg	140				
Chloroethane	ND	ug/kg	140				
1,1-Dichloroethene	ND	ug/kg	69.				
trans-1,2-Dichloroethene	ND	ug/kg	100				
Trichloroethene	ND	ug/kg	69.				
1,2-Dichlorobenzene	ND	ug/kg	350				
1,3-Dichlorobenzene	ND	ug/kg	350				
1,4-Dichlorobenzene	ND	ug/kg	350				
Methyl tert butyl ether	ND	ug/kg	140				
p/m-Xylene	ND	ug/kg	140				
o-Xylene	ND	ug/kg	140				
cis-1,2-Dichloroethene	ND	ug/kg	69.				
Dibromomethane	ND	ug/kg	690				
1,4-Dichlorobutane	ND	ug/kg	690				
Iodomethane	ND	ug/kg	690				
1,2,3-Trichloropropane	ND	ug/kg	690				
Styrene	ND	ug/kg	140				
Dichlorodifluoromethane	ND	ug/kg	690				
Acetone	ND	ug/kg	690				
Carbon disulfide	ND	ug/kg	690				
2-Butanone	ND	ug/kg	690				
Vinyl acetate	ND	ug/kg	690				
4-Methyl-2-pentanone	ND	ug/kg	690				
2-Hexanone	ND	ug/kg	690				
Ethyl methacrylate	ND	ug/kg	690				
Acrolein	ND	ug/kg	1700				
Acrylonitrile	ND	ug/kg	690				
Bromochloromethane	ND	ug/kg	350				
Tetrahydrofuran	ND	ug/kg	1400				
2,2-Dichloropropane	ND	ug/kg	350				
1,2-Dibromoethane	ND	ug/kg	280				
1,3-Dichloropropane	ND	ug/kg	350				
1,1,1,2-Tetrachloroethane	ND	ug/kg	69.				
Bromobenzene	ND	ug/kg	350				
n-Butylbenzene	ND	ug/kg	69.				
sec-Butylbenzene	ND	ug/kg	69.				
tert-Butylbenzene	ND	ug/kg	350				
o-Chlorotoluene	ND	ug/kg	350				
p-Chlorotoluene	ND	ug/kg	350				
1,2-Dibromo-3-chloropropane	ND	ug/kg	350				
Hexachlorobutadiene	ND	ug/kg	350				
Isopropylbenzene	ND	ug/kg	69.				
p-Isopropyltoluene	ND	ug/kg	69.				
Naphthalene	ND	ug/kg	350				
n-Propylbenzene	ND	ug/kg	69.				
1,2,3-Trichlorobenzene	ND	ug/kg	350				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0602382-12  
SED-3

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics 8260 via High 5035 cont'd				1 8260B	0220 21:41	PD
1,2,4-Trichlorobenzene	ND	ug/kg	350			
1,3,5-Trimethylbenzene	ND	ug/kg	350			
1,2,4-Trimethylbenzene	ND	ug/kg	350			
trans-1,4-Dichloro-2-butene	ND	ug/kg	350			
Ethyl ether	ND	ug/kg	350			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	94.0	%	70-130			
Toluene-d8	95.0	%	70-130			
4-Bromofluorobenzene	102	%	70-130			
Dibromofluoromethane	92.0	%	70-130			
Polychlorinated Biphenyls				1 8082	0220 15:45 0223 22:38	SS
Aroclor 1221	ND	ug/kg	52.1			
Aroclor 1232	ND	ug/kg	52.1			
Aroclor 1242/1016	ND	ug/kg	52.1			
Aroclor 1248	ND	ug/kg	52.1			
Aroclor 1254	ND	ug/kg	52.1			
Aroclor 1260	ND	ug/kg	52.1			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	79.0	%	30-150			
Decachlorobiphenyl	70.0	%	30-150			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

**Laboratory Job Number: L0602382**

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 06-07,11-12 (L0602309-06, WG230206-1)					
Solids, Total	88	88	%	0	
Total Metals for sample(s) 01-04,09-10 (L0602382-01, WG230623-1)					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	ND	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.0009	0.0008	mg/l	4	20
Copper, Total	0.0010	0.0010	mg/l	4	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Thallium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.0068	ND	mg/l	NC	20
Total Metals for sample(s) 07,11-12 (L0602300-01, WG230496-1)					
Arsenic, Total	1.5	1.3	mg/kg	14	35
Cadmium, Total	ND	ND	mg/kg	NC	35
Chromium, Total	5.8	5.7	mg/kg	2	35
Lead, Total	12	12	mg/kg	0	35
Selenium, Total	ND	ND	mg/kg	NC	35
Silver, Total	ND	ND	mg/kg	NC	35
Total Metals for sample(s) 07,11-12 (L0602387-02, WG230390-3)					
Mercury, Total	ND	ND	mg/kg	NC	35
Total Metals for sample(s) 01-04,09-10 (L0602446-12, WG230658-3)					
Mercury, Total	0.0018	0.0019	mg/l	3	20

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0602382

Parameter	% Recovery	QC Criteria
Total Metals LCS for sample(s) 01-04,09-10 (WG230623-4)		
Antimony, Total	97	80-120
Arsenic, Total	97	80-120
Beryllium, Total	100	80-120
Cadmium, Total	108	80-120
Chromium, Total	98	80-120
Copper, Total	96	80-120
Lead, Total	102	80-120
Nickel, Total	98	80-120
Selenium, Total	103	80-120
Silver, Total	98	80-120
Thallium, Total	94	80-120
Zinc, Total	107	80-120
Total Metals LCS for sample(s) 07,11-12 (WG230496-4)		
Antimony, Total	86	70-140
Arsenic, Total	99	70-140
Beryllium, Total	91	70-140
Cadmium, Total	99	70-140
Chromium, Total	91	70-140
Copper, Total	87	70-140
Lead, Total	99	70-140
Nickel, Total	91	70-140
Selenium, Total	97	70-140
Silver, Total	84	70-140
Thallium, Total	101	70-140
Zinc, Total	91	70-140
Total Metals LCS for sample(s) 07,11-12 (WG230390-1)		
Mercury, Total	96	85-115
Total Metals LCS for sample(s) 01-04,09-10 (WG230658-1)		
Mercury, Total	98	85-115
Volatile Organics by GC/MS 8260 LCS for sample(s) 01-02,04-05,09-10 (WG230302-9)		
Chlorobenzene	112	75-130
Benzene	115	76-127
Toluene	114	76-125
1,1-Dichloroethene	110	61-145
Trichloroethene	103	71-120
Surrogate(s)		
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130
Dibromofluoromethane	96	70-130

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0602382

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics 8260 via High 5035 LCS for sample(s) 07-08,11-12 (WG230273-5)		
Chlorobenzene	100	60-133
Benzene	109	66-142
Toluene	105	59-139
1,1-Dichloroethene	103	59-172
Trichloroethene	108	62-137
Surrogate(s)		
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130
Dibromofluoromethane	98	70-130
SVOC's by GC/MS 8270 LCS for sample(s) 01-02,04,09-10 (WG230235-2)		
Acenaphthene	66	46-118
1,2,4-Trichlorobenzene	46	39-98
2-Chloronaphthalene	62	40-140
1,2-Dichlorobenzene	45	40-140
1,4-Dichlorobenzene	42	36-97
2,4-Dinitrotoluene	120	24-96
2,6-Dinitrotoluene	128	40-140
Fluoranthene	92	40-140
4-Chlorophenyl phenyl ether	76	40-140
n-Nitrosodi-n-propylamine	59	41-116
Butyl benzyl phthalate	99	40-140
Anthracene	78	40-140
Pyrene	87	26-127
Hexachloropropene	45	40-140
P-Chloro-M-Cresol	75	23-97
2-Chlorophenol	50	27-123
2-Nitrophenol	60	30-130
4-Nitrophenol	55	10-80
2,4-Dinitrophenol	83	30-130
Pentachlorophenol	87	9-103
Phenol	26	12-110
Surrogate(s)		
2-Fluorophenol	33	21-120
Phenol-d6	31	10-120
Nitrobenzene-d5	67	23-120
2-Fluorobiphenyl	55	43-120
2,4,6-Tribromophenol	83	10-120
4-Terphenyl-d14	89	33-120
PAH by GC/MS SIM 8270M LCS for sample(s) 01-02,04,09-10 (WG230236-2)		
Acenaphthene	60	46-118
2-Chloronaphthalene	70	
Fluoranthene	76	
Anthracene	84	

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0602382**

Continued

Parameter	% Recovery	QC Criteria
PAH by GC/MS SIM 8270M LCS for sample(s) 01-02,04,09-10 (WG230236-2)		
Pyrene	82	26-127
Pentachlorophenol	72	9-103
Surrogate(s)		
2-Fluorophenol	49	21-120
Phenol-d6	38	10-120
Nitrobenzene-d5	67	23-120
2-Fluorobiphenyl	55	43-120
2,4,6-Tribromophenol	69	10-120
4-Terphenyl-d14	58	33-120
Polychlorinated Biphenyls LCS for sample(s) 06-07,11-12 (WG230230-2)		
Aroclor 1242/1016	84	40-140
Aroclor 1260	86	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	69	30-150
Decachlorobiphenyl	77	30-150
Total Metals SPIKE for sample(s) 01-04,09-10 (L0602382-01, WG230623-2)		
Antimony, Total	90	80-120
Arsenic, Total	91	80-120
Beryllium, Total	93	80-120
Cadmium, Total	98	80-120
Chromium, Total	91	80-120
Copper, Total	90	80-120
Lead, Total	96	80-120
Nickel, Total	93	80-120
Selenium, Total	89	80-120
Silver, Total	91	80-120
Thallium, Total	89	80-120
Zinc, Total	98	80-120
Total Metals SPIKE for sample(s) 07,11-12 (L0602300-01, WG230496-2)		
Antimony, Total	103	70-140
Arsenic, Total	100	70-140
Beryllium, Total	94	70-140
Cadmium, Total	101	70-140
Chromium, Total	96	70-140
Copper, Total	107	70-140
Lead, Total	111	70-140
Nickel, Total	92	70-140
Selenium, Total	94	70-140
Silver, Total	86	70-140
Thallium, Total	90	70-140
Zinc, Total	99	70-140

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0602382

Continued

Parameter	% Recovery	QC Criteria
Total Metals SPIKE for sample(s) 07,11-12 (L0602387-02, WG230390-2)		
Mercury, Total	103	70-130
Total Metals SPIKE for sample(s) 01-04,09-10 (L0602446-12, WG230658-2)		
Mercury, Total	104	70-130



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH MS/MSD ANALYSIS**

**Laboratory Job Number: L0602382**

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC/MS 8260 for sample(s) 01-02,04-05,09-10 (L0602282-17, WG230302-2)					
Chlorobenzene	110	103	7	20	75-130
Benzene	112	104	7	20	76-127
Toluene	112	105	6	20	76-125
1,1-Dichloroethene	102	94	8	20	61-145
Trichloroethene	105	94	11	20	71-120
Surrogate(s)					
1,2-Dichloroethane-d4	95	91	4		70-130
Toluene-d8	102	102	0		70-130
4-Bromofluorobenzene	99	104	5		70-130
Dibromofluoromethane	98	94	4		70-130
Volatile Organics 8260 via High 5035 for sample(s) 07-08,11-12 (L0602300-01, WG230273-2)					
Chlorobenzene	94	96	2	30	60-133
Benzene	101	105	4	30	66-142
Toluene	96	99	3	30	59-139
1,1-Dichloroethene	93	96	3	30	59-172
Trichloroethene	96	99	3	30	62-137
Surrogate(s)					
1,2-Dichloroethane-d4	95	92	3		70-130
Toluene-d8	95	94	1		70-130
4-Bromofluorobenzene	102	100	2		70-130
Dibromofluoromethane	95	94	1		70-130
SVOC's by GC/MS 8270 for sample(s) 01-02,04,09-10 (L0602382-01, WG230235-4)					
Acenaphthene	40	69	53	30	46-118
1,2,4-Trichlorobenzene	30	59	65	30	39-98
2-Chloronaphthalene	39	69	56	30	40-140
1,2-Dichlorobenzene	29	54	60	30	40-140
1,4-Dichlorobenzene	27	49	58	30	36-97
2,4-Dinitrotoluene	80	120	40	30	24-96
2,6-Dinitrotoluene	82	130	45	30	40-140
Fluoranthene	60	93	43	30	40-140
4-Chlorophenyl phenyl ether	47	78	50	30	40-140
n-Nitrosodi-n-propylamine	48	64	29	30	41-116
Butyl benzyl phthalate	61	98	47	30	40-140
Anthracene	44	76	53	30	40-140
Pyrene	52	88	51	30	26-127
Hexachloropropene	32	64	67	30	40-140
P-Chloro-M-Cresol	50	81	47	30	23-97
2-Chlorophenol	37	59	46	30	27-123
2-Nitrophenol	41	71	54	30	30-130
4-Nitrophenol	65	86	28	30	10-80
2,4-Dinitrophenol	50	86	53	30	30-130
Pentachlorophenol	55	91	49	30	9-103
Phenol	32	47	38	30	12-110

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0602382

Continued

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
SVOC's by GC/MS 8270 for sample(s) 01-02,04,09-10 (L0602382-01, WG230235-4)					
Surrogate(s)					
2-Fluorophenol	37	51	32		21-120
Phenol-d6	43	59	31		10-120
Nitrobenzene-d5	49	79	47		23-120
2-Fluorobiphenyl	39	65	50		43-120
2,4,6-Tribromophenol	58	85	38		10-120
4-Terphenyl-d14	63	88	33		33-120
PAH by GC/MS SIM 8270M for sample(s) 01-02,04,09-10 (L0602382-01, WG230236-4)					
Acenaphthene	27	69	88	40	46-118
2-Chloronaphthalene	29	78	92	40	
Fluoranthene	37	88	82	40	
Anthracene	29	74	87	40	
Pyrene	38	93	84	40	26-127
Pentachlorophenol	34	83	84	40	9-103
Surrogate(s)					
2-Fluorophenol	29	66	78		21-120
Phenol-d6	34	75	75		10-120
Nitrobenzene-d5	29	76	90		23-120
2-Fluorobiphenyl	32	79	85		43-120
2,4,6-Tribromophenol	44	95	73		10-120
4-Terphenyl-d14	47	86	59		33-120
Polychlorinated Biphenyls for sample(s) 06-07,11-12 (L0602382-06, WG230230-4)					
Aroclor 1242/1016	80	74	8	50	40-140
Aroclor 1260	81	71	12	50	40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	75	68	10		30-150
Decachlorobiphenyl	70	61	14		30-150

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

**Laboratory Job Number: L0602382**

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
Blank Analysis for sample(s) 01-04,09-10 (WG230623-3)								
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Beryllium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Cadmium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Chromium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Copper, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Lead, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Nickel, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0223 16:00	0224 00:25	BM
Silver, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Thallium, Total	ND	mg/l	0.0005	1	6020	0223 16:00	0224 00:25	BM
Zinc, Total	ND	mg/l	0.0050	1	6020	0223 16:00	0224 00:25	BM
Blank Analysis for sample(s) 07,11-12 (WG230496-3)								
Total Metals								
				1	3051			
Antimony, Total	ND	mg/kg	2.0	1	6010B	0222 18:00	0223 14:40	RW
Arsenic, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Beryllium, Total	ND	mg/kg	0.20	1	6010B	0222 18:00	0223 14:40	RW
Cadmium, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Chromium, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Copper, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Lead, Total	ND	mg/kg	2.0	1	6010B	0222 18:00	0223 14:40	RW
Nickel, Total	ND	mg/kg	1.0	1	6010B	0222 18:00	0223 14:40	RW
Selenium, Total	ND	mg/kg	0.80	1	6010B	0222 18:00	0223 14:40	RW
Silver, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Thallium, Total	ND	mg/kg	0.40	1	6010B	0222 18:00	0223 14:40	RW
Zinc, Total	ND	mg/kg	2.0	1	6010B	0222 18:00	0223 14:40	RW
Blank Analysis for sample(s) 07,11-12 (WG230390-4)								
Total Metals								
Mercury, Total	ND	mg/kg	0.08	1	7471A	0221 21:00	0222 10:42	DM
Blank Analysis for sample(s) 01-04,09-10 (WG230658-4)								
Total Metals								
Mercury, Total	ND	mg/l	0.0002	1	7470A	0223 19:00	0224 11:37	DM
Blank Analysis for sample(s) 01-02,04-05,09-10 (WG230302-10)								
Volatile Organics by GC/MS 8260				1	8260B		0222 10:10	PD
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-02,04-05,09-10 (WG230302-10)							
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0222 10:10 PD	
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,4-Dichlorobutane	ND	ug/l	5.0				
Iodomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
Vinyl acetate	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Ethyl methacrylate	ND	ug/l	5.0				
Acrolein	ND	ug/l	12.				
Acrylonitrile	ND	ug/l	5.0				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01-02,04-05,09-10 (WG230302-10)						
Volatile Organics by GC/MS 8260 cont'd						
				1 8260B	0222 10:10 PD	
Bromochloromethane	ND	ug/l	2.5			
Tetrahydrofuran	ND	ug/l	10.			
2,2-Dichloropropane	ND	ug/l	2.5			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
Bromobenzene	ND	ug/l	2.5			
n-Butylbenzene	ND	ug/l	0.50			
sec-Butylbenzene	ND	ug/l	0.50			
tert-Butylbenzene	ND	ug/l	2.5			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	0.60			
Isopropylbenzene	ND	ug/l	0.50			
p-Isopropyltoluene	ND	ug/l	0.50			
Naphthalene	ND	ug/l	2.5			
n-Propylbenzene	ND	ug/l	0.50			
1,2,3-Trichlorobenzene	ND	ug/l	2.5			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			
1,3,5-Trimethylbenzene	ND	ug/l	2.5			
1,2,4-Trimethylbenzene	ND	ug/l	2.5			
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5			
Ethyl ether	ND	ug/l	2.5			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	102	%	70-130			
Toluene-d8	104	%	70-130			
4-Bromofluorobenzene	112	%	70-130			
Dibromofluoromethane	98.0	%	70-130			
Blank Analysis for sample(s) 07-08,11-12 (WG230273-6)						
Volatile Organics 8260 via High 5035						
				1 8260B	0220 15:58 PD	
Methylene chloride	ND	ug/kg	500			
1,1-Dichloroethane	ND	ug/kg	75.			
Chloroform	ND	ug/kg	75.			
Carbon tetrachloride	ND	ug/kg	50.			
1,2-Dichloropropane	ND	ug/kg	180			
Dibromochloromethane	ND	ug/kg	50.			
1,1,2-Trichloroethane	ND	ug/kg	75.			
Tetrachloroethene	ND	ug/kg	50.			
Chlorobenzene	ND	ug/kg	50.			
Trichlorofluoromethane	ND	ug/kg	250			
1,2-Dichloroethane	ND	ug/kg	50.			
1,1,1-Trichloroethane	ND	ug/kg	50.			
Bromodichloromethane	ND	ug/kg	50.			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 07-08,11-12 (WG230273-6)							
Volatile Organics 8260 via High 5035 cont'd				1 8260B		0220 15:58 PD	
trans-1,3-Dichloropropene	ND	ug/kg	50.				
cis-1,3-Dichloropropene	ND	ug/kg	50.				
1,1-Dichloropropene	ND	ug/kg	250				
Bromoform	ND	ug/kg	200				
1,1,2,2-Tetrachloroethane	ND	ug/kg	50.				
Benzene	ND	ug/kg	50.				
Toluene	ND	ug/kg	75.				
Ethylbenzene	ND	ug/kg	50.				
Chloromethane	ND	ug/kg	250				
Bromomethane	ND	ug/kg	100				
Vinyl chloride	ND	ug/kg	100				
Chloroethane	ND	ug/kg	100				
1,1-Dichloroethene	ND	ug/kg	50.				
trans-1,2-Dichloroethene	ND	ug/kg	75.				
Trichloroethene	ND	ug/kg	50.				
1,2-Dichlorobenzene	ND	ug/kg	250				
1,3-Dichlorobenzene	ND	ug/kg	250				
1,4-Dichlorobenzene	ND	ug/kg	250				
Methyl tert butyl ether	ND	ug/kg	100				
p/m-Xylene	ND	ug/kg	100				
o-Xylene	ND	ug/kg	100				
cis-1,2-Dichloroethene	ND	ug/kg	50.				
Dibromomethane	ND	ug/kg	500				
1,4-Dichlorobutane	ND	ug/kg	500				
Iodomethane	ND	ug/kg	500				
1,2,3-Trichloropropane	ND	ug/kg	500				
Styrene	ND	ug/kg	100				
Dichlorodifluoromethane	ND	ug/kg	500				
Acetone	ND	ug/kg	500				
Carbon disulfide	ND	ug/kg	500				
2-Butanone	ND	ug/kg	500				
Vinyl acetate	ND	ug/kg	500				
4-Methyl-2-pentanone	ND	ug/kg	500				
2-Hexanone	ND	ug/kg	500				
Ethyl methacrylate	ND	ug/kg	500				
Acrolein	ND	ug/kg	1200				
Acrylonitrile	ND	ug/kg	500				
Bromochloromethane	ND	ug/kg	250				
Tetrahydrofuran	ND	ug/kg	1000				
2,2-Dichloropropane	ND	ug/kg	250				
1,2-Dibromoethane	ND	ug/kg	200				
1,3-Dichloropropane	ND	ug/kg	250				
1,1,1,2-Tetrachloroethane	ND	ug/kg	50.				
Bromobenzene	ND	ug/kg	250				
n-Butylbenzene	ND	ug/kg	50.				
sec-Butylbenzene	ND	ug/kg	50.				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 07-08,11-12 (WG230273-6)						
Volatile Organics 8260 via High 5035 cont'd				1 8260B	0220 15:58 PD	
tert-Butylbenzene	ND	ug/kg	250			
o-Chlorotoluene	ND	ug/kg	250			
p-Chlorotoluene	ND	ug/kg	250			
1,2-Dibromo-3-chloropropane	ND	ug/kg	250			
Hexachlorobutadiene	ND	ug/kg	250			
Isopropylbenzene	ND	ug/kg	50.			
p-Isopropyltoluene	ND	ug/kg	50.			
Naphthalene	ND	ug/kg	250			
n-Propylbenzene	ND	ug/kg	50.			
1,2,3-Trichlorobenzene	ND	ug/kg	250			
1,2,4-Trichlorobenzene	ND	ug/kg	250			
1,3,5-Trimethylbenzene	ND	ug/kg	250			
1,2,4-Trimethylbenzene	ND	ug/kg	250			
trans-1,4-Dichloro-2-butene	ND	ug/kg	250			
Ethyl ether	ND	ug/kg	250			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	102	%	70-130			
Toluene-d8	93.0	%	70-130			
4-Bromofluorobenzene	100	%	70-130			
Dibromofluoromethane	98.0	%	70-130			
Blank Analysis for sample(s) 01-02,04,09-10 (WG230235-1)						
SVOC's by GC/MS 8270				1 8270C	0220 12:00 0222 18:14 RL	
Acenaphthene	ND	ug/l	5.0			
Benzidine	ND	ug/l	50.			
1,2,4-Trichlorobenzene	ND	ug/l	5.0			
Hexachlorobenzene	ND	ug/l	5.0			
Bis(2-chloroethyl)ether	ND	ug/l	5.0			
1-Chloronaphthalene	ND	ug/l	5.0			
2-Chloronaphthalene	ND	ug/l	6.0			
1,2-Dichlorobenzene	ND	ug/l	5.0			
1,3-Dichlorobenzene	ND	ug/l	5.0			
1,4-Dichlorobenzene	ND	ug/l	5.0			
3,3'-Dichlorobenzidine	ND	ug/l	50.			
2,4-Dinitrotoluene	ND	ug/l	6.0			
2,6-Dinitrotoluene	ND	ug/l	5.0			
Azobenzene	ND	ug/l	5.0			
Fluoranthene	ND	ug/l	5.0			
4-Chlorophenyl phenyl ether	ND	ug/l	5.0			
4-Bromophenyl phenyl ether	ND	ug/l	5.0			
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0			
Bis(2-chloroethoxy)methane	ND	ug/l	5.0			
Hexachlorobutadiene	ND	ug/l	10.			
Hexachlorocyclopentadiene	ND	ug/l	10.			
Hexachloroethane	ND	ug/l	5.0			



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-02,04,09-10 (WG230235-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00	0222 18:14	RL
Isophorone	ND	ug/l	5.0				
Naphthalene	ND	ug/l	5.0				
Nitrobenzene	ND	ug/l	5.0				
NDPA/DPA	ND	ug/l	15.				
n-Nitrosodi-n-propylamine	ND	ug/l	5.0				
Bis(2-ethylhexyl)phthalate	ND	ug/l	10.				
Butyl benzyl phthalate	ND	ug/l	5.0				
Di-n-butylphthalate	ND	ug/l	5.0				
Di-n-octylphthalate	ND	ug/l	5.0				
Diethyl phthalate	ND	ug/l	5.0				
Dimethyl phthalate	ND	ug/l	5.0				
Benzo(a)anthracene	ND	ug/l	5.0				
Benzo(a)pyrene	ND	ug/l	5.0				
Benzo(b)fluoranthene	ND	ug/l	5.0				
Benzo(k)fluoranthene	ND	ug/l	5.0				
Chrysene	ND	ug/l	5.0				
Acenaphthylene	ND	ug/l	5.0				
Anthracene	ND	ug/l	5.0				
Benzo(ghi)perylene	ND	ug/l	5.0				
Fluorene	ND	ug/l	5.0				
Phenanthrene	ND	ug/l	5.0				
Dibenzo(a,h)anthracene	ND	ug/l	5.0				
Indeno(1,2,3-cd)pyrene	ND	ug/l	7.0				
Pyrene	ND	ug/l	5.0				
Benzo(e)pyrene	ND	ug/l	5.0				
Biphenyl	ND	ug/l	5.0				
Perylene	ND	ug/l	5.0				
Aniline	ND	ug/l	10.				
4-Chloroaniline	ND	ug/l	5.0				
1-Methylnaphthalene	ND	ug/l	5.0				
2-Nitroaniline	ND	ug/l	5.0				
3-Nitroaniline	ND	ug/l	5.0				
4-Nitroaniline	ND	ug/l	7.0				
Dibenzofuran	ND	ug/l	5.0				
a,a-Dimethylphenethylamine	ND	ug/l	50.				
Hexachloropropene	ND	ug/l	10.				
Nitrosodi-n-butylamine	ND	ug/l	10.				
2-Methylnaphthalene	ND	ug/l	5.0				
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.				
Pentachlorobenzene	ND	ug/l	20.				
a-Naphthylamine	ND	ug/l	20.				
b-Naphthylamine	ND	ug/l	20.				
Phenacetin	ND	ug/l	10.				
Dimethoate	ND	ug/l	20.				
4-Aminobiphenyl	ND	ug/l	10.				
Pentachloronitrobenzene	ND	ug/l	10.				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01-02,04,09-10 (WG230235-1)						
SVOC's by GC/MS 8270 cont'd				1 8270C	0220 12:00 0222 18:14 RL	
Isodrin	ND	ug/l	10.			
p-Dimethylaminoazobenzene	ND	ug/l	10.			
Chlorobenzilate	ND	ug/l	20.			
3-Methylcholanthrene	ND	ug/l	20.			
Ethyl Methanesulfonate	ND	ug/l	15.			
Acetophenone	ND	ug/l	20.			
Nitrosodipiperidine	ND	ug/l	20.			
7,12-Dimethylbenz(a)anthracene	ND	ug/l	10.			
n-Nitrosodimethylamine	ND	ug/l	50.			
2,4,6-Trichlorophenol	ND	ug/l	5.0			
p-Chloro-m-cresol	ND	ug/l	5.0			
2-Chlorophenol	ND	ug/l	6.0			
2,4-Dichlorophenol	ND	ug/l	10.			
2,4-Dimethylphenol	ND	ug/l	10.			
2-Nitrophenol	ND	ug/l	20.			
4-Nitrophenol	ND	ug/l	10.			
2,4-Dinitrophenol	ND	ug/l	20.			
4,6-Dinitro-o-cresol	ND	ug/l	20.			
Pentachlorophenol	ND	ug/l	20.			
Phenol	ND	ug/l	7.0			
2-Methylphenol	ND	ug/l	6.0			
3-Methylphenol/4-Methylphenol	ND	ug/l	6.0			
2,4,5-Trichlorophenol	ND	ug/l	5.0			
2,6-Dichlorophenol	ND	ug/l	10.			
Benzoic Acid	ND	ug/l	50.			
Benzyl Alcohol	ND	ug/l	10.			
Carbazole	ND	ug/l	5.0			
Pyridine	ND	ug/l	50.			
2-Picoline	ND	ug/l	20.			
Pronamide	ND	ug/l	20.			
Methyl methanesulfonate	ND	ug/l	20.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	34.0	%	21-120			
Phenol-d6	33.0	%	10-120			
Nitrobenzene-d5	56.0	%	23-120			
2-Fluorobiphenyl	40.0	%	43-120			
2,4,6-Tribromophenol	56.0	%	10-120			
4-Terphenyl-d14	72.0	%	33-120			
Blank Analysis for sample(s) 01-02,04,09-10 (WG230236-1)						
PAH by GC/MS SIM 8270M				1 8270C-M	0220 12:00 0222 19:49 RL	
Acenaphthene	ND	ug/l	0.20			
2-Chloronaphthalene	ND	ug/l	0.20			
Fluoranthene	ND	ug/l	0.20			
Hexachlorobutadiene	ND	ug/l	0.50			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0602382

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01-02,04,09-10 (WG230236-1)						
PAH by GC/MS SIM 8270M cont'd				1 8270C-M	0220 12:00 0222 19:49 RL	
Naphthalene	ND	ug/l	0.20			
Benzo(a)anthracene	ND	ug/l	0.20			
Benzo(a)pyrene	ND	ug/l	0.20			
Benzo(b)fluoranthene	ND	ug/l	0.20			
Benzo(k)fluoranthene	ND	ug/l	0.20			
Chrysene	ND	ug/l	0.20			
Acenaphthylene	ND	ug/l	0.20			
Anthracene	ND	ug/l	0.20			
Benzo(ghi)perylene	ND	ug/l	0.20			
Fluorene	ND	ug/l	0.20			
Phenanthrene	ND	ug/l	0.20			
Dibenzo(a,h)anthracene	ND	ug/l	0.20			
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20			
Pyrene	ND	ug/l	0.20			
1-Methylnaphthalene	ND	ug/l	0.20			
2-Methylnaphthalene	ND	ug/l	0.20			
Pentachlorophenol	ND	ug/l	0.80			
Hexachlorobenzene	ND	ug/l	0.80			
Perylene	ND	ug/l	0.20			
Biphenyl	ND	ug/l	0.20			
2,6-Dimethylnaphthalene	ND	ug/l	0.20			
1-Methylphenanthrene	ND	ug/l	0.20			
Benzo(e)Pyrene	ND	ug/l	0.20			
Hexachloroethane	ND	ug/l	0.80			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	39.0	%	21-120			
Phenol-d6	32.0	%	10-120			
Nitrobenzene-d5	48.0	%	23-120			
2-Fluorobiphenyl	39.0	%	43-120			
2,4,6-Tribromophenol	54.0	%	10-120			
4-Terphenyl-d14	49.0	%	33-120			
Blank Analysis for sample(s) 06-07,11-12 (WG230230-1)						
Polychlorinated Biphenyls				1 8082	0220 15:45 0223 18:50 SS	
Aroclor 1221	ND	ug/kg	33.3			
Aroclor 1232	ND	ug/kg	33.3			
Aroclor 1242/1016	ND	ug/kg	33.3			
Aroclor 1248	ND	ug/kg	33.3			
Aroclor 1254	ND	ug/kg	33.3			
Aroclor 1260	ND	ug/kg	33.3			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	69.0	%	30-150			
Decachlorobiphenyl	80.0	%	30-150			

**ALPHA ANALYTICAL LABORATORIES**  
**ADDENDUM I**

---

**REFERENCES**

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

**GLOSSARY OF TERMS AND SYMBOLS**

REF        Reference number in which test method may be found.  
METHOD    Method number by which analysis was performed.  
ID         Initials of the analyst.  
ND         Not detected in comparison to the reported detection limit.  
NI         Not Ignitable.  
ug/cart    Micrograms per Cartridge.

**LIMITATION OF LIABILITIES**

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.



# CHAIN OF CUSTODY

PAGE 1 OF 2

Eight Walkup Drive Westborough, MA 01581  
TEL: 508-898-9220 FAX: 508-898-9193

## Client Information

Client: Tighe + Bond Inc.

Address: 130 Southampton Rd.  
Westfield, MA 01085

Phone: 413-572-3271

Fax: 413-568-9764

Email: jmperry@tighebond.com

☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: US Tsubaki

Project Location: Bennington, VT

Project #: B-0360-5-69

Project Manager: Paul G. Regulier

ALPHA Quote #:

## Turn-Around Time

☒ Standard

☐ RUSH (only confirmed if pre-approved!)

Date Due: 5 Day

Time:

Date Rec'd in Lab: 2/17

ALPHA Job #: L0602342

## Report Information - Data Deliverables

☐ FAX

☒ EMAIL

☐ ADEX

☐ Add'l Deliverables

## Billing Information

☐ Same as Client info

PO #:

## Regulatory Requirements/Report Limits

State /Fed Program

Criteria

VT

Region 9 PRG's / VT GW standards

## MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☒ No

Are MCP Analytical Methods Required?

☐ Yes ☒ No

Are Drinking Water Samples Submitted?

☒ Yes ☐ No

Have you met minimum field QC requirements?

ANALYSIS  
VT Priority Pollutants  
VOCs  
Semi-VOCs (8270)  
8260  
PCB-8280  
8260 H+L

## SAMPLE HANDLING

Filtration

☐ Done

☒ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

## Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials											TOTAL # BOTTLES
		Date	Time													
2382-1	MW-3 (1B)	2/16/06	1040	GW	JMP	X	X	X								
2	MW-1 (1B)	2/16/06	1205	GW	JMP	X	X	X								
3	Duplicate	2/16/06	—	GW	JMP	X										
4	MW-2 (1B)	2/16/06	1305	GW	JMP	X	X	X								
5	Trip Blank - 8260	2/14/06	1605	N/A	TLH				X							
6	T-1 composite	2/16/06	1330	Soil	JMP					X						
7	Trench Drain	2/16/06	1400	Soil/Sed.	JMP	X	X	X								
8	Trip Blanks	2/14/06	1810	N/A	SLR					X						
9	SW-2	2/14/06	1430	GW	JMP	X	X	X								
10	SW-1	2/14/06	1445	GW	JMP	X	X	X								

## QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR  
PROJECT MCP?

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.



ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Tighe & Bond

Laboratory Job Number: L0601928

Address: 53 Southampton Road

Westfield, MA 01085

Date Received: 10-FEB-2006

Attn: Mr. Jason Perry

Date Reported: 17-FEB-2006

Project Number: B-360-3-69

Delivery Method: Alpha

Site: US TSUBAKI

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0601928-01	B-1 (0'-5')	BENNINGTON, VT
L0601928-02	MW-1 (1B) (0'-5')	BENNINGTON, VT
L0601928-03	B-1 (5'-10')	BENNINGTON, VT
L0601928-04	B-5 (5'-10')	BENNINGTON, VT
L0601928-05	MW-1 (1B) (5'-10')	BENNINGTON, VT
L0601928-06	B-3 (0'-5')	BENNINGTON, VT
L0601928-07	B-6 (5'-10')	BENNINGTON, VT
L0601928-08	MW-2 (1B) (0'-5')	BENNINGTON, VT
L0601928-09	B-5 (0'-5')	BENNINGTON, VT
L0601928-10	B-4 (5'-10')	BENNINGTON, VT
L0601928-11	TRIP BLANKS	BENNINGTON, VT

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by:   
Technical Director

ALPHA ANALYTICAL LABORATORIES  
NARRATIVE REPORT

Laboratory Job Number: L0601928

---

PCB

L0601928-06 has elevated limits of detection due to the 5x dilution required by the matrix interferences encountered during the extraction, concentration, and/or digestion of the sample.

SemiVolatile Organics

All project required reporting limits were not achieved on L0601928-01 through -05.

The LCS and MS/MSD % recoveries for 2,4-Dinitrotoluene are above the acceptance criteria for the method.

The MS/MSD % recoveries for 2,4-Dinitrophenol are below the acceptance criteria for the method.

The MS/MSD RPD for 2,4-Dinitrophenol is above the acceptance criteria for the method.

PAH

The MSD % recovery for Pentachlorophenol is below the acceptance criteria for the method.



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-01	<b>Date Collected:</b> 09-FEB-2006 12:00
B-1 (0'-5')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber,3-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	91	%	0.10	30 2540G			0214 18:22 PJ
Volatile Organics 8260 via Low 5035				1 8260B			0214 18:23 PD
Methylene chloride	ND	ug/kg	9.3				
1,1-Dichloroethane	ND	ug/kg	1.4				
Chloroform	ND	ug/kg	1.4				
Carbon tetrachloride	ND	ug/kg	0.93				
1,2-Dichloropropane	ND	ug/kg	3.2				
Dibromochloromethane	ND	ug/kg	0.93				
1,1,2-Trichloroethane	ND	ug/kg	1.4				
Tetrachloroethene	ND	ug/kg	0.93				
Chlorobenzene	ND	ug/kg	0.93				
Trichlorofluoromethane	ND	ug/kg	4.6				
1,2-Dichloroethane	ND	ug/kg	0.93				
1,1,1-Trichloroethane	ND	ug/kg	0.93				
Bromodichloromethane	ND	ug/kg	0.93				
trans-1,3-Dichloropropene	ND	ug/kg	0.93				
cis-1,3-Dichloropropene	ND	ug/kg	0.93				
1,1-Dichloropropene	ND	ug/kg	4.6				
Bromoform	ND	ug/kg	3.7				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.93				
Benzene	ND	ug/kg	0.93				
Toluene	ND	ug/kg	1.4				
Ethylbenzene	ND	ug/kg	0.93				
Chloromethane	ND	ug/kg	4.6				
Bromomethane	ND	ug/kg	1.9				
Vinyl chloride	ND	ug/kg	1.9				
Chloroethane	ND	ug/kg	1.9				
1,1-Dichloroethene	ND	ug/kg	0.93				
trans-1,2-Dichloroethene	ND	ug/kg	1.4				
Trichloroethene	ND	ug/kg	0.93				
1,2-Dichlorobenzene	ND	ug/kg	4.6				
1,3-Dichlorobenzene	ND	ug/kg	4.6				
1,4-Dichlorobenzene	ND	ug/kg	4.6				
Methyl tert butyl ether	ND	ug/kg	1.9				
p/m-Xylene	ND	ug/kg	1.9				
o-Xylene	ND	ug/kg	1.9				
cis-1,2-Dichloroethene	ND	ug/kg	0.93				
Dibromomethane	ND	ug/kg	9.3				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-01  
B-1 (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035 cont'd				1	8260B	0214 18:23 PD	
1,4-Dichlorobutane	ND	ug/kg	9.3				
Iodomethane	ND	ug/kg	9.3				
1,2,3-Trichloropropane	ND	ug/kg	9.3				
Styrene	ND	ug/kg	1.9				
Dichlorodifluoromethane	ND	ug/kg	9.3				
Acetone	47	ug/kg	9.3				
Carbon disulfide	ND	ug/kg	9.3				
2-Butanone	ND	ug/kg	9.3				
Vinyl acetate	ND	ug/kg	9.3				
4-Methyl-2-pentanone	ND	ug/kg	9.3				
2-Hexanone	ND	ug/kg	9.3				
Ethyl methacrylate	ND	ug/kg	9.3				
Acrolein	ND	ug/kg	23.				
Acrylonitrile	ND	ug/kg	9.3				
Bromochloromethane	ND	ug/kg	4.6				
Tetrahydrofuran	ND	ug/kg	19.				
2,2-Dichloropropane	ND	ug/kg	4.6				
1,2-Dibromoethane	ND	ug/kg	3.7				
1,3-Dichloropropane	ND	ug/kg	4.6				
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.93				
Bromobenzene	ND	ug/kg	4.6				
n-Butylbenzene	ND	ug/kg	0.93				
sec-Butylbenzene	ND	ug/kg	0.93				
tert-Butylbenzene	ND	ug/kg	4.6				
o-Chlorotoluene	ND	ug/kg	4.6				
p-Chlorotoluene	ND	ug/kg	4.6				
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.6				
Hexachlorobutadiene	ND	ug/kg	4.6				
Isopropylbenzene	ND	ug/kg	0.93				
p-Isopropyltoluene	ND	ug/kg	0.93				
Naphthalene	ND	ug/kg	4.6				
n-Propylbenzene	ND	ug/kg	0.93				
1,2,3-Trichlorobenzene	ND	ug/kg	4.6				
1,2,4-Trichlorobenzene	ND	ug/kg	4.6				
1,3,5-Trimethylbenzene	ND	ug/kg	4.6				
1,2,4-Trimethylbenzene	ND	ug/kg	4.6				
trans-1,4-Dichloro-2-butene	ND	ug/kg	4.6				
Ethyl ether	ND	ug/kg	4.6				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	117	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	100	%	70-130				
Dibromofluoromethane	115	%	70-130				
SVOC's by GC/MS 8270				1	8270C	0214 18:25 0216 15:55 RL	
Acenaphthene	ND	ug/kg	370				
Benzidine	ND	ug/kg	3700				
1,2,4-Trichlorobenzene	ND	ug/kg	370				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-01  
B-1 (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 15:55	RL
Hexachlorobenzene	ND	ug/kg	370					
Bis(2-chloroethyl)ether	ND	ug/kg	370					
1-Chloronaphthalene	ND	ug/kg	370					
2-Chloronaphthalene	ND	ug/kg	440					
1,2-Dichlorobenzene	ND	ug/kg	370					
1,3-Dichlorobenzene	ND	ug/kg	370					
1,4-Dichlorobenzene	ND	ug/kg	370					
3,3'-Dichlorobenzidine	ND	ug/kg	730					
2,4-Dinitrotoluene	ND	ug/kg	370					
2,6-Dinitrotoluene	ND	ug/kg	370					
Azobenzene	ND	ug/kg	370					
Fluoranthene	ND	ug/kg	370					
4-Chlorophenyl phenyl ether	ND	ug/kg	370					
4-Bromophenyl phenyl ether	ND	ug/kg	370					
Bis(2-chloroisopropyl)ether	ND	ug/kg	370					
Bis(2-chloroethoxy)methane	ND	ug/kg	370					
Hexachlorobutadiene	ND	ug/kg	730					
Hexachlorocyclopentadiene	ND	ug/kg	730					
Hexachloroethane	ND	ug/kg	370					
Isophorone	ND	ug/kg	370					
Naphthalene	ND	ug/kg	370					
Nitrobenzene	ND	ug/kg	370					
NDPA/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	370					
Bis(2-ethylhexyl)phthalate	ND	ug/kg	730					
Butyl benzyl phthalate	ND	ug/kg	370					
Di-n-butylphthalate	ND	ug/kg	370					
Di-n-octylphthalate	ND	ug/kg	370					
Diethyl phthalate	ND	ug/kg	370					
Dimethyl phthalate	ND	ug/kg	370					
Benzo(a)anthracene	ND	ug/kg	370					
Benzo(a)pyrene	ND	ug/kg	370					
Benzo(b)fluoranthene	ND	ug/kg	370					
Benzo(k)fluoranthene	ND	ug/kg	370					
Chrysene	ND	ug/kg	370					
Acenaphthylene	ND	ug/kg	370					
Anthracene	ND	ug/kg	370					
Benzo(ghi)perylene	ND	ug/kg	370					
Fluorene	ND	ug/kg	370					
Phenanthrene	ND	ug/kg	370					
Dibenzo(a,h)anthracene	ND	ug/kg	370					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	370					
Pyrene	ND	ug/kg	370					
Benzo(e)pyrene	ND	ug/kg	370					
Biphenyl	ND	ug/kg	370					
Perylene	ND	ug/kg	370					
Aniline	ND	ug/kg	730					
4-Chloroaniline	ND	ug/kg	370					
1-Methylnaphthalene	ND	ug/kg	370					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-01  
B-1 (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 15:55	RL
2-Nitroaniline	ND	ug/kg	370					
3-Nitroaniline	ND	ug/kg	370					
4-Nitroaniline	ND	ug/kg	510					
Dibenzofuran	ND	ug/kg	370					
a,a-Dimethylphenethylamine	ND	ug/kg	3700					
Hexachloropropene	ND	ug/kg	730					
Nitrosodi-n-butylamine	ND	ug/kg	730					
2-Methylnaphthalene	ND	ug/kg	370					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1500					
Pentachlorobenzene	ND	ug/kg	1500					
a-Naphthylamine	ND	ug/kg	1500					
b-Naphthylamine	ND	ug/kg	1500					
Phenacetin	ND	ug/kg	730					
Dimethoate	ND	ug/kg	1500					
4-Aminobiphenyl	ND	ug/kg	730					
Pentachloronitrobenzene	ND	ug/kg	730					
Isodrin	ND	ug/kg	730					
p-Dimethylaminoazobenzene	ND	ug/kg	730					
Chlorobenzilate	ND	ug/kg	1500					
3-Methylcholanthrene	ND	ug/kg	1500					
Ethyl Methanesulfonate	ND	ug/kg	1100					
Acetophenone	ND	ug/kg	1500					
Nitrosodipiperidine	ND	ug/kg	1500					
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	730					
n-Nitrosodimethylamine	ND	ug/kg	3700					
2,4,6-Trichlorophenol	ND	ug/kg	370					
p-Chloro-m-cresol	ND	ug/kg	370					
2-Chlorophenol	ND	ug/kg	440					
2,4-Dichlorophenol	ND	ug/kg	730					
2,4-Dimethylphenol	ND	ug/kg	370					
2-Nitrophenol	ND	ug/kg	1500					
4-Nitrophenol	ND	ug/kg	730					
2,4-Dinitrophenol	ND	ug/kg	1500					
4,6-Dinitro-o-cresol	ND	ug/kg	1500					
Pentachlorophenol	ND	ug/kg	1500					
Phenol	ND	ug/kg	510					
2-Methylphenol	ND	ug/kg	440					
3-Methylphenol/4-Methylphenol	ND	ug/kg	440					
2,4,5-Trichlorophenol	ND	ug/kg	370					
2,6-Dichlorophenol	ND	ug/kg	730					
Benzoic Acid	ND	ug/kg	3700					
Benzyl Alcohol	ND	ug/kg	730					
Carbazole	ND	ug/kg	370					
Pyridine	ND	ug/kg	3700					
2-Picoline	ND	ug/kg	1500					
Pronamide	ND	ug/kg	1500					
Methyl methanesulfonate	ND	ug/kg	1500					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-01  
B-1 (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 15:55 RL	
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	68.0	%	25-120			
Phenol-d6	94.0	%	10-120			
Nitrobenzene-d5	82.0	%	23-120			
2-Fluorobiphenyl	63.0	%	30-120			
2,4,6-Tribromophenol	69.0	%	19-120			
4-Terphenyl-d14	80.0	%	18-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 14:24 RL	
Acenaphthene	ND	ug/kg	15.			
2-Chloronaphthalene	ND	ug/kg	15.			
Fluoranthene	ND	ug/kg	15.			
Hexachlorobutadiene	ND	ug/kg	37.			
Naphthalene	ND	ug/kg	15.			
Benzo(a)anthracene	ND	ug/kg	15.			
Benzo(a)pyrene	ND	ug/kg	15.			
Benzo(b)fluoranthene	ND	ug/kg	15.			
Benzo(k)fluoranthene	ND	ug/kg	15.			
Chrysene	ND	ug/kg	15.			
Acenaphthylene	ND	ug/kg	15.			
Anthracene	ND	ug/kg	15.			
Benzo(ghi)perylene	ND	ug/kg	15.			
Fluorene	ND	ug/kg	15.			
Phenanthrene	ND	ug/kg	15.			
Dibenzo(a,h)anthracene	ND	ug/kg	15.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	15.			
Pyrene	ND	ug/kg	15.			
1-Methylnaphthalene	ND	ug/kg	15.			
2-Methylnaphthalene	ND	ug/kg	15.			
Pentachlorophenol	ND	ug/kg	59.			
Hexachlorobenzene	ND	ug/kg	59.			
Perylene	ND	ug/kg	15.			
Biphenyl	ND	ug/kg	15.			
2,6-Dimethylnaphthalene	ND	ug/kg	15.			
1-Methylphenanthrene	ND	ug/kg	15.			
Benzo(e)Pyrene	ND	ug/kg	15.			
Hexachloroethane	ND	ug/kg	59.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	59.0	%	25-120			
Phenol-d6	78.0	%	10-120			
Nitrobenzene-d5	63.0	%	23-120			
2-Fluorobiphenyl	59.0	%	30-120			
2,4,6-Tribromophenol	58.0	%	19-120			
4-Terphenyl-d14	57.0	%	18-120			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0601928-02 **Date Collected:** 09-FEB-2006 12:00  
**Sample Matrix:** MW-1 (1B) (0'-5') **Date Received :** 10-FEB-2006  
SOIL **Date Reported :** 17-FEB-2006  
**Condition of Sample:** Satisfactory **Field Prep:** None  
**Number & Type of Containers:** 1-Amber,3-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	95	%	0.10	30 2540G			0214 18:22 PJ
Volatile Organics 8260 via Low 5035				1 8260B			0216 16:29 PD
Methylene chloride	ND	ug/kg	9.6				
1,1-Dichloroethane	ND	ug/kg	1.4				
Chloroform	ND	ug/kg	1.4				
Carbon tetrachloride	ND	ug/kg	0.96				
1,2-Dichloropropane	ND	ug/kg	3.3				
Dibromochloromethane	ND	ug/kg	0.96				
1,1,2-Trichloroethane	ND	ug/kg	1.4				
Tetrachloroethene	ND	ug/kg	0.96				
Chlorobenzene	ND	ug/kg	0.96				
Trichlorofluoromethane	ND	ug/kg	4.8				
1,2-Dichloroethane	ND	ug/kg	0.96				
1,1,1-Trichloroethane	ND	ug/kg	0.96				
Bromodichloromethane	ND	ug/kg	0.96				
trans-1,3-Dichloropropene	ND	ug/kg	0.96				
cis-1,3-Dichloropropene	ND	ug/kg	0.96				
1,1-Dichloropropene	ND	ug/kg	4.8				
Bromoform	ND	ug/kg	3.8				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.96				
Benzene	ND	ug/kg	0.96				
Toluene	ND	ug/kg	1.4				
Ethylbenzene	ND	ug/kg	0.96				
Chloromethane	ND	ug/kg	4.8				
Bromomethane	ND	ug/kg	1.9				
Vinyl chloride	ND	ug/kg	1.9				
Chloroethane	ND	ug/kg	1.9				
1,1-Dichloroethene	ND	ug/kg	0.96				
trans-1,2-Dichloroethene	ND	ug/kg	1.4				
Trichloroethene	ND	ug/kg	0.96				
1,2-Dichlorobenzene	ND	ug/kg	4.8				
1,3-Dichlorobenzene	ND	ug/kg	4.8				
1,4-Dichlorobenzene	ND	ug/kg	4.8				
Methyl tert butyl ether	ND	ug/kg	1.9				
p/m-Xylene	ND	ug/kg	1.9				
o-Xylene	ND	ug/kg	1.9				
cis-1,2-Dichloroethene	ND	ug/kg	0.96				
Dibromomethane	ND	ug/kg	9.6				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-02  
MW-1 (1B) (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035 cont'd				1	8260B	0216 16:29 PD	
1,4-Dichlorobutane	ND	ug/kg	9.6				
Iodomethane	ND	ug/kg	9.6				
1,2,3-Trichloropropane	ND	ug/kg	9.6				
Styrene	ND	ug/kg	1.9				
Dichlorodifluoromethane	ND	ug/kg	9.6				
Acetone	ND	ug/kg	9.6				
Carbon disulfide	ND	ug/kg	9.6				
2-Butanone	ND	ug/kg	9.6				
Vinyl acetate	ND	ug/kg	9.6				
4-Methyl-2-pentanone	ND	ug/kg	9.6				
2-Hexanone	ND	ug/kg	9.6				
Ethyl methacrylate	ND	ug/kg	9.6				
Acrolein	ND	ug/kg	24.				
Acrylonitrile	ND	ug/kg	9.6				
Bromochloromethane	ND	ug/kg	4.8				
Tetrahydrofuran	ND	ug/kg	19.				
2,2-Dichloropropane	ND	ug/kg	4.8				
1,2-Dibromoethane	ND	ug/kg	3.8				
1,3-Dichloropropane	ND	ug/kg	4.8				
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.96				
Bromobenzene	ND	ug/kg	4.8				
n-Butylbenzene	ND	ug/kg	0.96				
sec-Butylbenzene	ND	ug/kg	0.96				
tert-Butylbenzene	ND	ug/kg	4.8				
o-Chlorotoluene	ND	ug/kg	4.8				
p-Chlorotoluene	ND	ug/kg	4.8				
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.8				
Hexachlorobutadiene	ND	ug/kg	4.8				
Isopropylbenzene	ND	ug/kg	0.96				
p-Isopropyltoluene	ND	ug/kg	0.96				
Naphthalene	ND	ug/kg	4.8				
n-Propylbenzene	ND	ug/kg	0.96				
1,2,3-Trichlorobenzene	ND	ug/kg	4.8				
1,2,4-Trichlorobenzene	ND	ug/kg	4.8				
1,3,5-Trimethylbenzene	ND	ug/kg	4.8				
1,2,4-Trimethylbenzene	ND	ug/kg	4.8				
trans-1,4-Dichloro-2-butene	ND	ug/kg	4.8				
Ethyl ether	ND	ug/kg	4.8				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	121	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	93.0	%	70-130				
Dibromofluoromethane	130	%	70-130				
SVOC's by GC/MS 8270				1	8270C	0214 18:25	0216 16:20 RL
Acenaphthene	ND	ug/kg	350				
Benzidine	ND	ug/kg	3500				
1,2,4-Trichlorobenzene	ND	ug/kg	350				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-02  
MW-1 (1B) (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 16:20	RL
Hexachlorobenzene	ND	ug/kg	350					
Bis(2-chloroethyl)ether	ND	ug/kg	350					
1-Chloronaphthalene	ND	ug/kg	350					
2-Chloronaphthalene	ND	ug/kg	420					
1,2-Dichlorobenzene	ND	ug/kg	350					
1,3-Dichlorobenzene	ND	ug/kg	350					
1,4-Dichlorobenzene	ND	ug/kg	350					
3,3'-Dichlorobenzidine	ND	ug/kg	700					
2,4-Dinitrotoluene	ND	ug/kg	350					
2,6-Dinitrotoluene	ND	ug/kg	350					
Azobenzene	ND	ug/kg	350					
Fluoranthene	ND	ug/kg	350					
4-Chlorophenyl phenyl ether	ND	ug/kg	350					
4-Bromophenyl phenyl ether	ND	ug/kg	350					
Bis(2-chloroisopropyl)ether	ND	ug/kg	350					
Bis(2-chloroethoxy)methane	ND	ug/kg	350					
Hexachlorobutadiene	ND	ug/kg	700					
Hexachlorocyclopentadiene	ND	ug/kg	700					
Hexachloroethane	ND	ug/kg	350					
Isophorone	ND	ug/kg	350					
Naphthalene	ND	ug/kg	350					
Nitrobenzene	ND	ug/kg	350					
NDPA/DPA	ND	ug/kg	1000					
n-Nitrosodi-n-propylamine	ND	ug/kg	350					
Bis(2-ethylhexyl)phthalate	ND	ug/kg	700					
Butyl benzyl phthalate	ND	ug/kg	350					
Di-n-butylphthalate	ND	ug/kg	350					
Di-n-octylphthalate	ND	ug/kg	350					
Diethyl phthalate	ND	ug/kg	350					
Dimethyl phthalate	ND	ug/kg	350					
Benzo(a)anthracene	ND	ug/kg	350					
Benzo(a)pyrene	ND	ug/kg	350					
Benzo(b)fluoranthene	ND	ug/kg	350					
Benzo(k)fluoranthene	ND	ug/kg	350					
Chrysene	ND	ug/kg	350					
Acenaphthylene	ND	ug/kg	350					
Anthracene	ND	ug/kg	350					
Benzo(ghi)perylene	ND	ug/kg	350					
Fluorene	ND	ug/kg	350					
Phenanthrene	ND	ug/kg	350					
Dibenzo(a,h)anthracene	ND	ug/kg	350					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	350					
Pyrene	ND	ug/kg	350					
Benzo(e)pyrene	ND	ug/kg	350					
Biphenyl	ND	ug/kg	350					
Perylene	ND	ug/kg	350					
Aniline	ND	ug/kg	700					
4-Chloroaniline	ND	ug/kg	350					
1-Methylnaphthalene	ND	ug/kg	350					

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-02  
MW-1 (1B) (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 16:20	RL
2-Nitroaniline	ND	ug/kg	350					
3-Nitroaniline	ND	ug/kg	350					
4-Nitroaniline	ND	ug/kg	490					
Dibenzofuran	ND	ug/kg	350					
a,a-Dimethylphenethylamine	ND	ug/kg	3500					
Hexachloropropene	ND	ug/kg	700					
Nitrosodi-n-butylamine	ND	ug/kg	700					
2-Methylnaphthalene	ND	ug/kg	350					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1400					
Pentachlorobenzene	ND	ug/kg	1400					
a-Naphthylamine	ND	ug/kg	1400					
b-Naphthylamine	ND	ug/kg	1400					
Phenacetin	ND	ug/kg	700					
Dimethoate	ND	ug/kg	1400					
4-Aminobiphenyl	ND	ug/kg	700					
Pentachloronitrobenzene	ND	ug/kg	700					
Isodrin	ND	ug/kg	700					
p-Dimethylaminoazobenzene	ND	ug/kg	700					
Chlorobenzilate	ND	ug/kg	1400					
3-Methylcholanthrene	ND	ug/kg	1400					
Ethyl Methanesulfonate	ND	ug/kg	1000					
Acetophenone	ND	ug/kg	1400					
Nitrosodipiperidine	ND	ug/kg	1400					
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	700					
n-Nitrosodimethylamine	ND	ug/kg	3500					
2,4,6-Trichlorophenol	ND	ug/kg	350					
p-Chloro-m-cresol	ND	ug/kg	350					
2-Chlorophenol	ND	ug/kg	420					
2,4-Dichlorophenol	ND	ug/kg	700					
2,4-Dimethylphenol	ND	ug/kg	350					
2-Nitrophenol	ND	ug/kg	1400					
4-Nitrophenol	ND	ug/kg	700					
2,4-Dinitrophenol	ND	ug/kg	1400					
4,6-Dinitro-o-cresol	ND	ug/kg	1400					
Pentachlorophenol	ND	ug/kg	1400					
Phenol	ND	ug/kg	490					
2-Methylphenol	ND	ug/kg	420					
3-Methylphenol/4-Methylphenol	ND	ug/kg	420					
2,4,5-Trichlorophenol	ND	ug/kg	350					
2,6-Dichlorophenol	ND	ug/kg	700					
Benzoic Acid	ND	ug/kg	3500					
Benzyl Alcohol	ND	ug/kg	700					
Carbazole	ND	ug/kg	350					
Pyridine	ND	ug/kg	3500					
2-Picoline	ND	ug/kg	1400					
Pronamide	ND	ug/kg	1400					
Methyl methanesulfonate	ND	ug/kg	1400					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-02  
MW-1 (1B) (0'-5')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 16:20 RL	
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	55.0	%	25-120			
Phenol-d6	76.0	%	10-120			
Nitrobenzene-d5	67.0	%	23-120			
2-Fluorobiphenyl	51.0	%	30-120			
2,4,6-Tribromophenol	55.0	%	19-120			
4-Terphenyl-d14	81.0	%	18-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 15:08 RL	
Acenaphthene	ND	ug/kg	14.			
2-Chloronaphthalene	ND	ug/kg	14.			
Fluoranthene	ND	ug/kg	14.			
Hexachlorobutadiene	ND	ug/kg	35.			
Naphthalene	ND	ug/kg	14.			
Benzo(a)anthracene	ND	ug/kg	14.			
Benzo(a)pyrene	ND	ug/kg	14.			
Benzo(b)fluoranthene	ND	ug/kg	14.			
Benzo(k)fluoranthene	ND	ug/kg	14.			
Chrysene	ND	ug/kg	14.			
Acenaphthylene	ND	ug/kg	14.			
Anthracene	ND	ug/kg	14.			
Benzo(ghi)perylene	ND	ug/kg	14.			
Fluorene	ND	ug/kg	14.			
Phenanthrene	ND	ug/kg	14.			
Dibenzo(a,h)anthracene	ND	ug/kg	14.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	14.			
Pyrene	ND	ug/kg	14.			
1-Methylnaphthalene	ND	ug/kg	14.			
2-Methylnaphthalene	ND	ug/kg	14.			
Pentachlorophenol	ND	ug/kg	56.			
Hexachlorobenzene	ND	ug/kg	56.			
Perylene	ND	ug/kg	14.			
Biphenyl	ND	ug/kg	14.			
2,6-Dimethylnaphthalene	ND	ug/kg	14.			
1-Methylphenanthrene	ND	ug/kg	14.			
Benzo(e)Pyrene	ND	ug/kg	14.			
Hexachloroethane	ND	ug/kg	56.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	48.0	%	25-120			
Phenol-d6	60.0	%	10-120			
Nitrobenzene-d5	48.0	%	23-120			
2-Fluorobiphenyl	43.0	%	30-120			
2,4,6-Tribromophenol	47.0	%	19-120			
4-Terphenyl-d14	58.0	%	18-120			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-03	<b>Date Collected:</b> 09-FEB-2006 12:00
B-1 (5'-10')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber,3-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	84	%	0.10	30 2540G			0214 18:22 PJ
Volatile Organics 8260 via Low 5035				1 8260B			0214 20:12 PD
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.6				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.1				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.1				
Bromoform	ND	ug/kg	4.1				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.1				
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.1				
1,3-Dichlorobenzene	ND	ug/kg	5.1				
1,4-Dichlorobenzene	ND	ug/kg	5.1				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	2.0				
o-Xylene	ND	ug/kg	2.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-03  
B-1 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035 cont'd				1	8260B	0214 20:12 PD	
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	2.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	37	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	26.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.1				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.1				
1,2-Dibromoethane	ND	ug/kg	4.1				
1,3-Dichloropropane	ND	ug/kg	5.1				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.1				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.1				
o-Chlorotoluene	ND	ug/kg	5.1				
p-Chlorotoluene	ND	ug/kg	5.1				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.1				
Hexachlorobutadiene	ND	ug/kg	5.1				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.1				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.1				
1,2,4-Trichlorobenzene	ND	ug/kg	5.1				
1,3,5-Trimethylbenzene	ND	ug/kg	5.1				
1,2,4-Trimethylbenzene	ND	ug/kg	5.1				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.1				
Ethyl ether	ND	ug/kg	5.1				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	122	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	97.0	%	70-130				
Dibromofluoromethane	120	%	70-130				
SVOC's by GC/MS 8270				1	8270C	0214 18:25 0216 16:45 RL	
Acenaphthene	ND	ug/kg	400				
Benzidine	ND	ug/kg	4000				
1,2,4-Trichlorobenzene	ND	ug/kg	400				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-03  
B-1 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 16:45	RL
Hexachlorobenzene	ND	ug/kg	400					
Bis(2-chloroethyl)ether	ND	ug/kg	400					
1-Chloronaphthalene	ND	ug/kg	400					
2-Chloronaphthalene	ND	ug/kg	480					
1,2-Dichlorobenzene	ND	ug/kg	400					
1,3-Dichlorobenzene	ND	ug/kg	400					
1,4-Dichlorobenzene	ND	ug/kg	400					
3,3'-Dichlorobenzidine	ND	ug/kg	790					
2,4-Dinitrotoluene	ND	ug/kg	400					
2,6-Dinitrotoluene	ND	ug/kg	400					
Azobenzene	ND	ug/kg	400					
Fluoranthene	ND	ug/kg	400					
4-Chlorophenyl phenyl ether	ND	ug/kg	400					
4-Bromophenyl phenyl ether	ND	ug/kg	400					
Bis(2-chloroisopropyl)ether	ND	ug/kg	400					
Bis(2-chloroethoxy)methane	ND	ug/kg	400					
Hexachlorobutadiene	ND	ug/kg	790					
Hexachlorocyclopentadiene	ND	ug/kg	790					
Hexachloroethane	ND	ug/kg	400					
Isophorone	ND	ug/kg	400					
Naphthalene	ND	ug/kg	400					
Nitrobenzene	ND	ug/kg	400					
NDPA/DPA	ND	ug/kg	1200					
n-Nitrosodi-n-propylamine	ND	ug/kg	400					
Bis(2-ethylhexyl)phthalate	ND	ug/kg	790					
Butyl benzyl phthalate	ND	ug/kg	400					
Di-n-butylphthalate	ND	ug/kg	400					
Di-n-octylphthalate	ND	ug/kg	400					
Diethyl phthalate	ND	ug/kg	400					
Dimethyl phthalate	ND	ug/kg	400					
Benzo(a)anthracene	ND	ug/kg	400					
Benzo(a)pyrene	ND	ug/kg	400					
Benzo(b)fluoranthene	ND	ug/kg	400					
Benzo(k)fluoranthene	ND	ug/kg	400					
Chrysene	ND	ug/kg	400					
Acenaphthylene	ND	ug/kg	400					
Anthracene	ND	ug/kg	400					
Benzo(ghi)perylene	ND	ug/kg	400					
Fluorene	ND	ug/kg	400					
Phenanthrene	ND	ug/kg	400					
Dibenzo(a,h)anthracene	ND	ug/kg	400					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	400					
Pyrene	ND	ug/kg	400					
Benzo(e)pyrene	ND	ug/kg	400					
Biphenyl	ND	ug/kg	400					
Perylene	ND	ug/kg	400					
Aniline	ND	ug/kg	790					
4-Chloroaniline	ND	ug/kg	400					
1-Methylnaphthalene	ND	ug/kg	400					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-03  
B-1 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 16:45	RL
2-Nitroaniline	ND	ug/kg	400					
3-Nitroaniline	ND	ug/kg	400					
4-Nitroaniline	ND	ug/kg	560					
Dibenzofuran	ND	ug/kg	400					
a,a-Dimethylphenethylamine	ND	ug/kg	4000					
Hexachloropropene	ND	ug/kg	790					
Nitrosodi-n-butylamine	ND	ug/kg	790					
2-Methylnaphthalene	ND	ug/kg	400					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1600					
Pentachlorobenzene	ND	ug/kg	1600					
a-Naphthylamine	ND	ug/kg	1600					
b-Naphthylamine	ND	ug/kg	1600					
Phenacetin	ND	ug/kg	790					
Dimethoate	ND	ug/kg	1600					
4-Aminobiphenyl	ND	ug/kg	790					
Pentachloronitrobenzene	ND	ug/kg	790					
Isodrin	ND	ug/kg	790					
p-Dimethylaminoazobenzene	ND	ug/kg	790					
Chlorobenzilate	ND	ug/kg	1600					
3-Methylcholanthrene	ND	ug/kg	1600					
Ethyl Methanesulfonate	ND	ug/kg	1200					
Acetophenone	ND	ug/kg	1600					
Nitrosodipiperidine	ND	ug/kg	1600					
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	790					
n-Nitrosodimethylamine	ND	ug/kg	4000					
2,4,6-Trichlorophenol	ND	ug/kg	400					
p-Chloro-m-cresol	ND	ug/kg	400					
2-Chlorophenol	ND	ug/kg	480					
2,4-Dichlorophenol	ND	ug/kg	790					
2,4-Dimethylphenol	ND	ug/kg	400					
2-Nitrophenol	ND	ug/kg	1600					
4-Nitrophenol	ND	ug/kg	790					
2,4-Dinitrophenol	ND	ug/kg	1600					
4,6-Dinitro-o-cresol	ND	ug/kg	1600					
Pentachlorophenol	ND	ug/kg	1600					
Phenol	ND	ug/kg	560					
2-Methylphenol	ND	ug/kg	480					
3-Methylphenol/4-Methylphenol	ND	ug/kg	480					
2,4,5-Trichlorophenol	ND	ug/kg	400					
2,6-Dichlorophenol	ND	ug/kg	790					
Benzoic Acid	ND	ug/kg	4000					
Benzyl Alcohol	ND	ug/kg	790					
Carbazole	ND	ug/kg	400					
Pyridine	ND	ug/kg	4000					
2-Picoline	ND	ug/kg	1600					
Pronamide	ND	ug/kg	1600					
Methyl methanesulfonate	ND	ug/kg	1600					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-03  
B-1 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 16:45 RL	
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	61.0	%	25-120			
Phenol-d6	87.0	%	10-120			
Nitrobenzene-d5	76.0	%	23-120			
2-Fluorobiphenyl	59.0	%	30-120			
2,4,6-Tribromophenol	71.0	%	19-120			
4-Terphenyl-d14	85.0	%	18-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 15:54 RL	
Acenaphthene	ND	ug/kg	16.			
2-Chloronaphthalene	ND	ug/kg	16.			
Fluoranthene	ND	ug/kg	16.			
Hexachlorobutadiene	ND	ug/kg	40.			
Naphthalene	ND	ug/kg	16.			
Benzo(a)anthracene	ND	ug/kg	16.			
Benzo(a)pyrene	ND	ug/kg	16.			
Benzo(b)fluoranthene	ND	ug/kg	16.			
Benzo(k)fluoranthene	ND	ug/kg	16.			
Chrysene	ND	ug/kg	16.			
Acenaphthylene	ND	ug/kg	16.			
Anthracene	ND	ug/kg	16.			
Benzo(ghi)perylene	ND	ug/kg	16.			
Fluorene	ND	ug/kg	16.			
Phenanthrene	ND	ug/kg	16.			
Dibenzo(a,h)anthracene	ND	ug/kg	16.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	16.			
Pyrene	ND	ug/kg	16.			
1-Methylnaphthalene	ND	ug/kg	16.			
2-Methylnaphthalene	ND	ug/kg	16.			
Pentachlorophenol	ND	ug/kg	63.			
Hexachlorobenzene	ND	ug/kg	63.			
Perylene	ND	ug/kg	16.			
Biphenyl	ND	ug/kg	16.			
2,6-Dimethylnaphthalene	ND	ug/kg	16.			
1-Methylphenanthrene	ND	ug/kg	16.			
Benzo(e)Pyrene	ND	ug/kg	16.			
Hexachloroethane	ND	ug/kg	63.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	55.0	%	25-120			
Phenol-d6	67.0	%	10-120			
Nitrobenzene-d5	55.0	%	23-120			
2-Fluorobiphenyl	52.0	%	30-120			
2,4,6-Tribromophenol	58.0	%	19-120			
4-Terphenyl-d14	54.0	%	18-120			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-04	<b>Date Collected:</b> 09-FEB-2006 12:00
B-5 (5'-10')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber,3-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	84	%	0.10	30 2540G			0214 18:22 PJ
Volatile Organics 8260 via Low 5035				1 8260B			0215 14:14 PD
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.6				
Chloroform	ND	ug/kg	1.6				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.6				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.6				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.2				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.2				
Bromoform	ND	ug/kg	4.2				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.6				
Ethylbenzene	21	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.2				
Bromomethane	ND	ug/kg	2.1				
Vinyl chloride	ND	ug/kg	2.1				
Chloroethane	ND	ug/kg	2.1				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.6				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.2				
1,3-Dichlorobenzene	ND	ug/kg	5.2				
1,4-Dichlorobenzene	ND	ug/kg	5.2				
Methyl tert butyl ether	ND	ug/kg	2.1				
p/m-Xylene	91	ug/kg	2.1				
o-Xylene	33	ug/kg	2.1				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-04  
B-5 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035 cont'd				1	8260B	0215 14:14 PD	
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	2.1				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	49	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	46	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	26.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.2				
Tetrahydrofuran	ND	ug/kg	21.				
2,2-Dichloropropane	ND	ug/kg	5.2				
1,2-Dibromoethane	ND	ug/kg	4.2				
1,3-Dichloropropane	ND	ug/kg	5.2				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.2				
n-Butylbenzene	1.6	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.2				
o-Chlorotoluene	ND	ug/kg	5.2				
p-Chlorotoluene	ND	ug/kg	5.2				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.2				
Hexachlorobutadiene	ND	ug/kg	5.2				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	12	ug/kg	5.2				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.2				
1,2,4-Trichlorobenzene	ND	ug/kg	5.2				
1,3,5-Trimethylbenzene	ND	ug/kg	5.2				
1,2,4-Trimethylbenzene	ND	ug/kg	5.2				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.2				
Ethyl ether	ND	ug/kg	5.2				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	117	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	128	%	70-130				
SVOC's by GC/MS 8270				1	8270C	0214 18:25	0216 17:09 RL
Acenaphthene	ND	ug/kg	400				
Benzidine	ND	ug/kg	4000				
1,2,4-Trichlorobenzene	ND	ug/kg	400				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-04  
B-5 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 17:09	RL
Hexachlorobenzene	ND	ug/kg	400					
Bis(2-chloroethyl)ether	ND	ug/kg	400					
1-Chloronaphthalene	ND	ug/kg	400					
2-Chloronaphthalene	ND	ug/kg	480					
1,2-Dichlorobenzene	ND	ug/kg	400					
1,3-Dichlorobenzene	ND	ug/kg	400					
1,4-Dichlorobenzene	ND	ug/kg	400					
3,3'-Dichlorobenzidine	ND	ug/kg	790					
2,4-Dinitrotoluene	ND	ug/kg	400					
2,6-Dinitrotoluene	ND	ug/kg	400					
Azobenzene	ND	ug/kg	400					
Fluoranthene	ND	ug/kg	400					
4-Chlorophenyl phenyl ether	ND	ug/kg	400					
4-Bromophenyl phenyl ether	ND	ug/kg	400					
Bis(2-chloroisopropyl)ether	ND	ug/kg	400					
Bis(2-chloroethoxy)methane	ND	ug/kg	400					
Hexachlorobutadiene	ND	ug/kg	790					
Hexachlorocyclopentadiene	ND	ug/kg	790					
Hexachloroethane	ND	ug/kg	400					
Isophorone	ND	ug/kg	400					
Naphthalene	ND	ug/kg	400					
Nitrobenzene	ND	ug/kg	400					
NDPA/DPA	ND	ug/kg	1200					
n-Nitrosodi-n-propylamine	ND	ug/kg	400					
Bis(2-ethylhexyl)phthalate	ND	ug/kg	790					
Butyl benzyl phthalate	ND	ug/kg	400					
Di-n-butylphthalate	ND	ug/kg	400					
Di-n-octylphthalate	ND	ug/kg	400					
Diethyl phthalate	ND	ug/kg	400					
Dimethyl phthalate	ND	ug/kg	400					
Benzo(a)anthracene	ND	ug/kg	400					
Benzo(a)pyrene	ND	ug/kg	400					
Benzo(b)fluoranthene	ND	ug/kg	400					
Benzo(k)fluoranthene	ND	ug/kg	400					
Chrysene	ND	ug/kg	400					
Acenaphthylene	ND	ug/kg	400					
Anthracene	ND	ug/kg	400					
Benzo(ghi)perylene	ND	ug/kg	400					
Fluorene	ND	ug/kg	400					
Phenanthrene	ND	ug/kg	400					
Dibenzo(a,h)anthracene	ND	ug/kg	400					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	400					
Pyrene	ND	ug/kg	400					
Benzo(e)pyrene	ND	ug/kg	400					
Biphenyl	ND	ug/kg	400					
Perylene	ND	ug/kg	400					
Aniline	ND	ug/kg	790					
4-Chloroaniline	ND	ug/kg	400					
1-Methylnaphthalene	ND	ug/kg	400					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-04  
B-5 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 17:09	RL
2-Nitroaniline	ND	ug/kg	400					
3-Nitroaniline	ND	ug/kg	400					
4-Nitroaniline	ND	ug/kg	560					
Dibenzofuran	ND	ug/kg	400					
a,a-Dimethylphenethylamine	ND	ug/kg	4000					
Hexachloropropene	ND	ug/kg	790					
Nitrosodi-n-butylamine	ND	ug/kg	790					
2-Methylnaphthalene	ND	ug/kg	400					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1600					
Pentachlorobenzene	ND	ug/kg	1600					
a-Naphthylamine	ND	ug/kg	1600					
b-Naphthylamine	ND	ug/kg	1600					
Phenacetin	ND	ug/kg	790					
Dimethoate	ND	ug/kg	1600					
4-Aminobiphenyl	ND	ug/kg	790					
Pentachloronitrobenzene	ND	ug/kg	790					
Isodrin	ND	ug/kg	790					
p-Dimethylaminoazobenzene	ND	ug/kg	790					
Chlorobenzilate	ND	ug/kg	1600					
3-Methylcholanthrene	ND	ug/kg	1600					
Ethyl Methanesulfonate	ND	ug/kg	1200					
Acetophenone	ND	ug/kg	1600					
Nitrosodipiperidine	ND	ug/kg	1600					
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	790					
n-Nitrosodimethylamine	ND	ug/kg	4000					
2,4,6-Trichlorophenol	ND	ug/kg	400					
p-Chloro-m-cresol	2400	ug/kg	400					
2-Chlorophenol	ND	ug/kg	480					
2,4-Dichlorophenol	ND	ug/kg	790					
2,4-Dimethylphenol	ND	ug/kg	400					
2-Nitrophenol	ND	ug/kg	1600					
4-Nitrophenol	ND	ug/kg	790					
2,4-Dinitrophenol	ND	ug/kg	1600					
4,6-Dinitro-o-cresol	ND	ug/kg	1600					
Pentachlorophenol	ND	ug/kg	1600					
Phenol	ND	ug/kg	560					
2-Methylphenol	ND	ug/kg	480					
3-Methylphenol/4-Methylphenol	ND	ug/kg	480					
2,4,5-Trichlorophenol	ND	ug/kg	400					
2,6-Dichlorophenol	ND	ug/kg	790					
Benzoic Acid	ND	ug/kg	4000					
Benzyl Alcohol	ND	ug/kg	790					
Carbazole	ND	ug/kg	400					
Pyridine	ND	ug/kg	4000					
2-Picoline	ND	ug/kg	1600					
Pronamide	ND	ug/kg	1600					
Methyl methanesulfonate	ND	ug/kg	1600					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-04  
B-5 (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 17:09 RL	
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	87.0	%	25-120			
Phenol-d6	120	%	10-120			
Nitrobenzene-d5	111	%	23-120			
2-Fluorobiphenyl	77.0	%	30-120			
2,4,6-Tribromophenol	79.0	%	19-120			
4-Terphenyl-d14	86.0	%	18-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 16:38 RL	
Acenaphthene	ND	ug/kg	16.			
2-Chloronaphthalene	ND	ug/kg	16.			
Fluoranthene	ND	ug/kg	16.			
Hexachlorobutadiene	ND	ug/kg	40.			
Naphthalene	ND	ug/kg	16.			
Benzo(a)anthracene	ND	ug/kg	16.			
Benzo(a)pyrene	ND	ug/kg	16.			
Benzo(b)fluoranthene	ND	ug/kg	16.			
Benzo(k)fluoranthene	ND	ug/kg	16.			
Chrysene	ND	ug/kg	16.			
Acenaphthylene	ND	ug/kg	16.			
Anthracene	ND	ug/kg	16.			
Benzo(ghi)perylene	ND	ug/kg	16.			
Fluorene	ND	ug/kg	16.			
Phenanthrene	25	ug/kg	16.			
Dibenzo(a,h)anthracene	ND	ug/kg	16.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	16.			
Pyrene	ND	ug/kg	16.			
1-Methylnaphthalene	ND	ug/kg	16.			
2-Methylnaphthalene	ND	ug/kg	16.			
Pentachlorophenol	ND	ug/kg	63.			
Hexachlorobenzene	ND	ug/kg	63.			
Perylene	ND	ug/kg	16.			
Biphenyl	ND	ug/kg	16.			
2,6-Dimethylnaphthalene	ND	ug/kg	16.			
1-Methylphenanthrene	ND	ug/kg	16.			
Benzo(e)Pyrene	ND	ug/kg	16.			
Hexachloroethane	ND	ug/kg	63.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	76.0	%	25-120			
Phenol-d6	90.0	%	10-120			
Nitrobenzene-d5	82.0	%	23-120			
2-Fluorobiphenyl	68.0	%	30-120			
2,4,6-Tribromophenol	64.0	%	19-120			
4-Terphenyl-d14	62.0	%	18-120			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-05	<b>Date Collected:</b> 09-FEB-2006 12:00
MW-1 (1B) (5'-10')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber,3-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	90	%	0.10	30 2540G			0214 18:22 PJ
Volatile Organics 8260 via Low 5035				1 8260B			0215 15:26 PD
Methylene chloride	ND	ug/kg	8.5				
1,1-Dichloroethane	ND	ug/kg	1.3				
Chloroform	ND	ug/kg	1.3				
Carbon tetrachloride	ND	ug/kg	0.85				
1,2-Dichloropropane	ND	ug/kg	3.0				
Dibromochloromethane	ND	ug/kg	0.85				
1,1,2-Trichloroethane	ND	ug/kg	1.3				
Tetrachloroethene	ND	ug/kg	0.85				
Chlorobenzene	ND	ug/kg	0.85				
Trichlorofluoromethane	ND	ug/kg	4.3				
1,2-Dichloroethane	ND	ug/kg	0.85				
1,1,1-Trichloroethane	ND	ug/kg	0.85				
Bromodichloromethane	ND	ug/kg	0.85				
trans-1,3-Dichloropropene	ND	ug/kg	0.85				
cis-1,3-Dichloropropene	ND	ug/kg	0.85				
1,1-Dichloropropene	ND	ug/kg	4.3				
Bromoform	ND	ug/kg	3.4				
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.85				
Benzene	ND	ug/kg	0.85				
Toluene	ND	ug/kg	1.3				
Ethylbenzene	ND	ug/kg	0.85				
Chloromethane	ND	ug/kg	4.3				
Bromomethane	ND	ug/kg	1.7				
Vinyl chloride	ND	ug/kg	1.7				
Chloroethane	ND	ug/kg	1.7				
1,1-Dichloroethene	ND	ug/kg	0.85				
trans-1,2-Dichloroethene	ND	ug/kg	1.3				
Trichloroethene	ND	ug/kg	0.85				
1,2-Dichlorobenzene	ND	ug/kg	4.3				
1,3-Dichlorobenzene	ND	ug/kg	4.3				
1,4-Dichlorobenzene	ND	ug/kg	4.3				
Methyl tert butyl ether	ND	ug/kg	1.7				
p/m-Xylene	ND	ug/kg	1.7				
o-Xylene	ND	ug/kg	1.7				
cis-1,2-Dichloroethene	ND	ug/kg	0.85				
Dibromomethane	ND	ug/kg	8.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-05  
MW-1 (1B) (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics 8260 via Low 5035 cont'd				1 8260B	0215 15:26 PD	
1,4-Dichlorobutane	ND	ug/kg	8.5			
Iodomethane	ND	ug/kg	8.5			
1,2,3-Trichloropropane	ND	ug/kg	8.5			
Styrene	ND	ug/kg	1.7			
Dichlorodifluoromethane	ND	ug/kg	8.5			
Acetone	35	ug/kg	8.5			
Carbon disulfide	ND	ug/kg	8.5			
2-Butanone	ND	ug/kg	8.5			
Vinyl acetate	ND	ug/kg	8.5			
4-Methyl-2-pentanone	ND	ug/kg	8.5			
2-Hexanone	ND	ug/kg	8.5			
Ethyl methacrylate	ND	ug/kg	8.5			
Acrolein	ND	ug/kg	21.			
Acrylonitrile	ND	ug/kg	8.5			
Bromochloromethane	ND	ug/kg	4.3			
Tetrahydrofuran	ND	ug/kg	17.			
2,2-Dichloropropane	ND	ug/kg	4.3			
1,2-Dibromoethane	ND	ug/kg	3.4			
1,3-Dichloropropane	ND	ug/kg	4.3			
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.85			
Bromobenzene	ND	ug/kg	4.3			
n-Butylbenzene	ND	ug/kg	0.85			
sec-Butylbenzene	ND	ug/kg	0.85			
tert-Butylbenzene	ND	ug/kg	4.3			
o-Chlorotoluene	ND	ug/kg	4.3			
p-Chlorotoluene	ND	ug/kg	4.3			
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.3			
Hexachlorobutadiene	ND	ug/kg	4.3			
Isopropylbenzene	ND	ug/kg	0.85			
p-Isopropyltoluene	ND	ug/kg	0.85			
Naphthalene	ND	ug/kg	4.3			
n-Propylbenzene	ND	ug/kg	0.85			
1,2,3-Trichlorobenzene	ND	ug/kg	4.3			
1,2,4-Trichlorobenzene	ND	ug/kg	4.3			
1,3,5-Trimethylbenzene	ND	ug/kg	4.3			
1,2,4-Trimethylbenzene	ND	ug/kg	4.3			
trans-1,4-Dichloro-2-butene	ND	ug/kg	4.3			
Ethyl ether	ND	ug/kg	4.3			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	106	%	70-130			
Toluene-d8	98.0	%	70-130			
4-Bromofluorobenzene	98.0	%	70-130			
Dibromofluoromethane	109	%	70-130			
SVOC's by GC/MS 8270				1 8270C	0214 18:25 0216 17:34 RL	
Acenaphthene	ND	ug/kg	370			
Benzidine	ND	ug/kg	3700			
1,2,4-Trichlorobenzene	ND	ug/kg	370			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-05  
MW-1 (1B) (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 17:34	RL
Hexachlorobenzene	ND	ug/kg	370					
Bis(2-chloroethyl)ether	ND	ug/kg	370					
1-Chloronaphthalene	ND	ug/kg	370					
2-Chloronaphthalene	ND	ug/kg	440					
1,2-Dichlorobenzene	ND	ug/kg	370					
1,3-Dichlorobenzene	ND	ug/kg	370					
1,4-Dichlorobenzene	ND	ug/kg	370					
3,3'-Dichlorobenzidine	ND	ug/kg	740					
2,4-Dinitrotoluene	ND	ug/kg	370					
2,6-Dinitrotoluene	ND	ug/kg	370					
Azobenzene	ND	ug/kg	370					
Fluoranthene	ND	ug/kg	370					
4-Chlorophenyl phenyl ether	ND	ug/kg	370					
4-Bromophenyl phenyl ether	ND	ug/kg	370					
Bis(2-chloroisopropyl)ether	ND	ug/kg	370					
Bis(2-chloroethoxy)methane	ND	ug/kg	370					
Hexachlorobutadiene	ND	ug/kg	740					
Hexachlorocyclopentadiene	ND	ug/kg	740					
Hexachloroethane	ND	ug/kg	370					
Isophorone	ND	ug/kg	370					
Naphthalene	ND	ug/kg	370					
Nitrobenzene	ND	ug/kg	370					
NDPA/DPA	ND	ug/kg	1100					
n-Nitrosodi-n-propylamine	ND	ug/kg	370					
Bis(2-ethylhexyl)phthalate	ND	ug/kg	740					
Butyl benzyl phthalate	ND	ug/kg	370					
Di-n-butylphthalate	ND	ug/kg	370					
Di-n-octylphthalate	ND	ug/kg	370					
Diethyl phthalate	ND	ug/kg	370					
Dimethyl phthalate	ND	ug/kg	370					
Benzo(a)anthracene	ND	ug/kg	370					
Benzo(a)pyrene	ND	ug/kg	370					
Benzo(b)fluoranthene	ND	ug/kg	370					
Benzo(k)fluoranthene	ND	ug/kg	370					
Chrysene	ND	ug/kg	370					
Acenaphthylene	ND	ug/kg	370					
Anthracene	ND	ug/kg	370					
Benzo(ghi)perylene	ND	ug/kg	370					
Fluorene	ND	ug/kg	370					
Phenanthrene	ND	ug/kg	370					
Dibenzo(a,h)anthracene	ND	ug/kg	370					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	370					
Pyrene	ND	ug/kg	370					
Benzo(e)pyrene	ND	ug/kg	370					
Biphenyl	ND	ug/kg	370					
Perylene	ND	ug/kg	370					
Aniline	ND	ug/kg	740					
4-Chloroaniline	ND	ug/kg	370					
1-Methylnaphthalene	ND	ug/kg	370					

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-05  
MW-1 (1B) (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE		ID
						PREP	ANAL	
SVOC's by GC/MS 8270 cont'd				1	8270C	0214 18:25	0216 17:34	RL
2-Nitroaniline	ND	ug/kg	370					
3-Nitroaniline	ND	ug/kg	370					
4-Nitroaniline	ND	ug/kg	520					
Dibenzofuran	ND	ug/kg	370					
a,a-Dimethylphenethylamine	ND	ug/kg	3700					
Hexachloropropene	ND	ug/kg	740					
Nitrosodi-n-butylamine	ND	ug/kg	740					
2-Methylnaphthalene	ND	ug/kg	370					
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1500					
Pentachlorobenzene	ND	ug/kg	1500					
a-Naphthylamine	ND	ug/kg	1500					
b-Naphthylamine	ND	ug/kg	1500					
Phenacetin	ND	ug/kg	740					
Dimethoate	ND	ug/kg	1500					
4-Aminobiphenyl	ND	ug/kg	740					
Pentachloronitrobenzene	ND	ug/kg	740					
Isodrin	ND	ug/kg	740					
p-Dimethylaminoazobenzene	ND	ug/kg	740					
Chlorobenzilate	ND	ug/kg	1500					
3-Methylcholanthrene	ND	ug/kg	1500					
Ethyl Methanesulfonate	ND	ug/kg	1100					
Acetophenone	ND	ug/kg	1500					
Nitrosodipiperidine	ND	ug/kg	1500					
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	740					
n-Nitrosodimethylamine	ND	ug/kg	3700					
2,4,6-Trichlorophenol	ND	ug/kg	370					
p-Chloro-m-cresol	ND	ug/kg	370					
2-Chlorophenol	ND	ug/kg	440					
2,4-Dichlorophenol	ND	ug/kg	740					
2,4-Dimethylphenol	ND	ug/kg	370					
2-Nitrophenol	ND	ug/kg	1500					
4-Nitrophenol	ND	ug/kg	740					
2,4-Dinitrophenol	ND	ug/kg	1500					
4,6-Dinitro-o-cresol	ND	ug/kg	1500					
Pentachlorophenol	ND	ug/kg	1500					
Phenol	ND	ug/kg	520					
2-Methylphenol	ND	ug/kg	440					
3-Methylphenol/4-Methylphenol	ND	ug/kg	440					
2,4,5-Trichlorophenol	ND	ug/kg	370					
2,6-Dichlorophenol	ND	ug/kg	740					
Benzoic Acid	ND	ug/kg	3700					
Benzyl Alcohol	ND	ug/kg	740					
Carbazole	ND	ug/kg	370					
Pyridine	ND	ug/kg	3700					
2-Picoline	ND	ug/kg	1500					
Pronamide	ND	ug/kg	1500					
Methyl methanesulfonate	ND	ug/kg	1500					

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-05  
MW-1 (1B) (5'-10')

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 17:34	RL
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	74.0	%	25-120			
Phenol-d6	105	%	10-120			
Nitrobenzene-d5	88.0	%	23-120			
2-Fluorobiphenyl	61.0	%	30-120			
2,4,6-Tribromophenol	69.0	%	19-120			
4-Terphenyl-d14	82.0	%	18-120			
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 17:23	RL
Acenaphthene	ND	ug/kg	15.			
2-Chloronaphthalene	ND	ug/kg	15.			
Fluoranthene	ND	ug/kg	15.			
Hexachlorobutadiene	ND	ug/kg	37.			
Naphthalene	ND	ug/kg	15.			
Benzo(a)anthracene	ND	ug/kg	15.			
Benzo(a)pyrene	ND	ug/kg	15.			
Benzo(b)fluoranthene	ND	ug/kg	15.			
Benzo(k)fluoranthene	ND	ug/kg	15.			
Chrysene	ND	ug/kg	15.			
Acenaphthylene	ND	ug/kg	15.			
Anthracene	ND	ug/kg	15.			
Benzo(ghi)perylene	ND	ug/kg	15.			
Fluorene	ND	ug/kg	15.			
Phenanthrene	ND	ug/kg	15.			
Dibenzo(a,h)anthracene	ND	ug/kg	15.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	15.			
Pyrene	ND	ug/kg	15.			
1-Methylnaphthalene	ND	ug/kg	15.			
2-Methylnaphthalene	ND	ug/kg	15.			
Pentachlorophenol	ND	ug/kg	59.			
Hexachlorobenzene	ND	ug/kg	59.			
Perylene	ND	ug/kg	15.			
Biphenyl	ND	ug/kg	15.			
2,6-Dimethylnaphthalene	ND	ug/kg	15.			
1-Methylphenanthrene	ND	ug/kg	15.			
Benzo(e)Pyrene	ND	ug/kg	15.			
Hexachloroethane	ND	ug/kg	59.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	58.0	%	25-120			
Phenol-d6	75.0	%	10-120			
Nitrobenzene-d5	63.0	%	23-120			
2-Fluorobiphenyl	55.0	%	30-120			
2,4,6-Tribromophenol	59.0	%	19-120			
4-Terphenyl-d14	54.0	%	18-120			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-06	<b>Date Collected:</b> 09-FEB-2006 12:00
B-3 (0'-5')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Solids, Total	96	%	0.10	30 2540G	0215 15:37	PJ
Total Metals				1 3051		
Antimony, Total	ND	mg/kg	2.1	1 6010B	0214 16:40 0215 13:33	RW
Arsenic, Total	2.0	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Beryllium, Total	ND	mg/kg	0.21	1 6010B	0214 16:40 0215 13:33	RW
Cadmium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Chromium, Total	6.3	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Copper, Total	4.0	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Lead, Total	3.0	mg/kg	2.1	1 6010B	0214 16:40 0215 13:33	RW
Mercury, Total	ND	mg/kg	0.08	1 7471A	0213 21:30 0214 15:43	DM
Nickel, Total	3.6	mg/kg	1.0	1 6010B	0214 16:40 0215 13:33	RW
Selenium, Total	ND	mg/kg	0.83	1 6010B	0214 16:40 0215 13:33	RW
Silver, Total	ND	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Thallium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40 0215 13:33	RW
Zinc, Total	11	mg/kg	2.1	1 6010B	0214 16:40 0215 13:33	RW
Polychlorinated Biphenyls				1 8082	0214 02:00 0216 21:39	SS
Aroclor 1221	ND	ug/kg	174.			
Aroclor 1232	ND	ug/kg	174.			
Aroclor 1242/1016	ND	ug/kg	174.			
Aroclor 1248	ND	ug/kg	174.			
Aroclor 1254	ND	ug/kg	174.			
Aroclor 1260	ND	ug/kg	174.			
Surrogate(s)	Recovery		QC Criteria			
2,4,5,6-Tetrachloro-m-xylene	92.0	%	30-150			
Decachlorobiphenyl	85.0	%	30-150			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-07	<b>Date Collected:</b> 09-FEB-2006 12:00
B-6 (5'-10')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	92	%	0.10	30 2540G		0215 15:37	PJ
Total Metals				1 3051			
Antimony, Total	ND	mg/kg	2.2	1 6010B	0214 16:40	0215 13:35	RW
Arsenic, Total	1.4	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Beryllium, Total	ND	mg/kg	0.22	1 6010B	0214 16:40	0215 13:35	RW
Cadmium, Total	ND	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Chromium, Total	4.5	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Copper, Total	2.4	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Lead, Total	2.4	mg/kg	2.2	1 6010B	0214 16:40	0215 13:35	RW
Mercury, Total	ND	mg/kg	0.09	1 7471A	0213 21:30	0214 15:45	DM
Nickel, Total	2.9	mg/kg	1.1	1 6010B	0214 16:40	0215 13:35	RW
Selenium, Total	ND	mg/kg	0.87	1 6010B	0214 16:40	0215 13:35	RW
Silver, Total	ND	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Thallium, Total	ND	mg/kg	0.43	1 6010B	0214 16:40	0215 13:35	RW
Zinc, Total	11	mg/kg	2.2	1 6010B	0214 16:40	0215 13:35	RW

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0601928-08  
**Sample Matrix:** MW-2 (1B) (0'-5') SOIL  
**Condition of Sample:** Satisfactory  
**Number & Type of Containers:** 1-Amber

**Date Collected:** 09-FEB-2006 12:00  
**Date Received :** 10-FEB-2006  
**Date Reported :** 17-FEB-2006

**Field Prep:** None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	86	%	0.10	30 2540G			0215 15:37 PJ
Total Metals				1 3051			
Antimony, Total	ND	mg/kg	2.3	1 6010B	0214 16:40	0215 13:38	RW
Arsenic, Total	2.4	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Beryllium, Total	ND	mg/kg	0.23	1 6010B	0214 16:40	0215 13:38	RW
Cadmium, Total	ND	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Chromium, Total	6.0	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Copper, Total	6.2	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Lead, Total	11	mg/kg	2.3	1 6010B	0214 16:40	0215 13:38	RW
Mercury, Total	ND	mg/kg	0.09	1 7471A	0213 21:30	0214 15:47	DM
Nickel, Total	5.0	mg/kg	1.1	1 6010B	0214 16:40	0215 13:38	RW
Selenium, Total	ND	mg/kg	0.92	1 6010B	0214 16:40	0215 13:38	RW
Silver, Total	ND	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Thallium, Total	ND	mg/kg	0.46	1 6010B	0214 16:40	0215 13:38	RW
Zinc, Total	33	mg/kg	2.3	1 6010B	0214 16:40	0215 13:38	RW

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-09	<b>Date Collected:</b> 09-FEB-2006 12:00
B-5 (0'-5')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	94	%	0.10	30 2540G		0215 15:37	PJ
Total Metals				1 3051			
Antimony, Total	ND	mg/kg	2.1	1 6010B	0214 16:40	0215 13:41	RW
Arsenic, Total	2.3	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Beryllium, Total	ND	mg/kg	0.21	1 6010B	0214 16:40	0215 13:41	RW
Cadmium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Chromium, Total	2.8	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Copper, Total	6.7	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Lead, Total	3.6	mg/kg	2.1	1 6010B	0214 16:40	0215 13:41	RW
Mercury, Total	ND	mg/kg	0.08	1 7471A	0213 21:30	0214 15:49	DM
Nickel, Total	4.4	mg/kg	1.1	1 6010B	0214 16:40	0215 13:41	RW
Selenium, Total	ND	mg/kg	0.85	1 6010B	0214 16:40	0215 13:41	RW
Silver, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Thallium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0215 13:41	RW
Zinc, Total	15	mg/kg	2.1	1 6010B	0214 16:40	0215 13:41	RW

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<b>Laboratory Sample Number:</b> L0601928-10	<b>Date Collected:</b> 09-FEB-2006 12:00
B-4 (5'-10')	<b>Date Received :</b> 10-FEB-2006
<b>Sample Matrix:</b> SOIL	<b>Date Reported :</b> 17-FEB-2006
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Amber	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Solids, Total	94	%	0.10	30 2540G		0215 15:37	PJ
Total Metals				1 3051			
Antimony, Total	ND	mg/kg	2.1	1 6010B	0214 16:40	0215 13:43	RW
Arsenic, Total	1.2	mg/kg	0.42	1 6010B	0214 16:40	0215 13:43	RW
Beryllium, Total	ND	mg/kg	0.21	1 6010B	0214 16:40	0215 13:43	RW
Cadmium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0215 13:43	RW
Chromium, Total	9.6	mg/kg	0.42	1 6010B	0214 16:40	0215 13:43	RW
Copper, Total	3.7	mg/kg	0.42	1 6010B	0214 16:40	0215 13:43	RW
Lead, Total	4.1	mg/kg	2.1	1 6010B	0214 16:40	0215 13:43	RW
Mercury, Total	ND	mg/kg	0.09	1 7471A	0213 21:30	0214 15:54	DM
Nickel, Total	3.2	mg/kg	1.0	1 6010B	0214 16:40	0215 13:43	RW
Selenium, Total	ND	mg/kg	0.85	1 6010B	0214 16:40	0215 13:43	RW
Silver, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0215 13:43	RW
Thallium, Total	ND	mg/kg	0.42	1 6010B	0214 16:40	0216 08:34	RW
Zinc, Total	18	mg/kg	2.1	1 6010B	0214 16:40	0215 13:43	RW

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0601928-11

Date Collected: 07-FEB-2006 09:50

TRIP BLANKS

Date Received : 10-FEB-2006

Sample Matrix: SOIL

Date Reported : 17-FEB-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 3-Vial

**Comments:**

Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035				1	8260B	0214 21:24 PD	
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	2.0				
o-Xylene	ND	ug/kg	2.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0601928-11  
TRIP BLANKS

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics 8260 via Low 5035 cont'd				1	8260B	0214 21:24 PD	
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	2.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	4.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				
1,2,4-Trimethylbenzene	ND	ug/kg	5.0				
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0				
Ethyl ether	ND	ug/kg	5.0				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	118	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	117	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

**Laboratory Job Number: L0601928**

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total for sample(s) 01-05 (L0601938-02, WG229643-1)					
Solids, Total	90	90	%	0	
Solids, Total for sample(s) 06-10 (L0601928-09, WG229735-1)					
Solids, Total	94	94	%	0	
Total Metals for sample(s) 06-10 (L0601958-02, WG229676-1)					
Arsenic, Total	3.4	3.0	mg/kg	13	35
Cadmium, Total	ND	ND	mg/kg	NC	35
Chromium, Total	21	20	mg/kg	5	35
Copper, Total	22	20	mg/kg	10	35
Lead, Total	3.5	3.4	mg/kg	3	35
Selenium, Total	ND	ND	mg/kg	NC	35
Silver, Total	ND	ND	mg/kg	NC	35
Zinc, Total	50	47	mg/kg	6	35
Total Metals for sample(s) 06-10 (L0601943-02, WG229537-3)					
Mercury, Total	ND	ND	mg/kg	NC	35
Volatile Organics 8260 via Low 5035 for sample(s) 01-05,11 (L0601928-05, WG229839-1)					
Methylene chloride	ND	ND	ug/kg	NC	30
1,1-Dichloroethane	ND	ND	ug/kg	NC	30
Chloroform	ND	ND	ug/kg	NC	30
Carbon tetrachloride	ND	ND	ug/kg	NC	30
1,2-Dichloropropane	ND	ND	ug/kg	NC	30
Dibromochloromethane	ND	ND	ug/kg	NC	30
1,1,2-Trichloroethane	ND	ND	ug/kg	NC	30
Tetrachloroethene	ND	ND	ug/kg	NC	30
Chlorobenzene	ND	ND	ug/kg	NC	30
Trichlorofluoromethane	ND	ND	ug/kg	NC	30
1,2-Dichloroethane	ND	ND	ug/kg	NC	30
1,1,1-Trichloroethane	ND	ND	ug/kg	NC	30
Bromodichloromethane	ND	ND	ug/kg	NC	30
trans-1,3-Dichloropropene	ND	ND	ug/kg	NC	30
cis-1,3-Dichloropropene	ND	ND	ug/kg	NC	30
1,1-Dichloropropene	ND	ND	ug/kg	NC	30
Bromoform	ND	ND	ug/kg	NC	30
1,1,2,2-Tetrachloroethane	ND	ND	ug/kg	NC	30
Benzene	ND	ND	ug/kg	NC	30
Toluene	ND	ND	ug/kg	NC	30
Ethylbenzene	ND	ND	ug/kg	NC	30
Chloromethane	ND	ND	ug/kg	NC	30
Bromomethane	ND	ND	ug/kg	NC	30
Vinyl chloride	ND	ND	ug/kg	NC	30
Chloroethane	ND	ND	ug/kg	NC	30
1,1-Dichloroethene	ND	ND	ug/kg	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/kg	NC	30
Trichloroethene	ND	ND	ug/kg	NC	30
1,2-Dichlorobenzene	ND	ND	ug/kg	NC	30

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

Laboratory Job Number: L0601928

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics 8260 via Low 5035 for sample(s) 01-05,11 (L0601928-05, WG229839-1)					
1,3-Dichlorobenzene	ND	ND	ug/kg	NC	30
1,4-Dichlorobenzene	ND	ND	ug/kg	NC	30
Methyl tert butyl ether	ND	ND	ug/kg	NC	30
p/m-Xylene	ND	ND	ug/kg	NC	30
o-Xylene	ND	ND	ug/kg	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/kg	NC	30
Dibromomethane	ND	ND	ug/kg	NC	30
1,4-Dichlorobutane	ND	ND	ug/kg	NC	30
Iodomethane	ND	ND	ug/kg	NC	30
1,2,3-Trichloropropane	ND	ND	ug/kg	NC	30
Styrene	ND	ND	ug/kg	NC	30
Dichlorodifluoromethane	ND	ND	ug/kg	NC	30
Acetone	35	29	ug/kg	17	30
Carbon disulfide	ND	ND	ug/kg	NC	30
2-Butanone	ND	ND	ug/kg	NC	30
Vinyl acetate	ND	ND	ug/kg	NC	30
4-Methyl-2-pentanone	ND	ND	ug/kg	NC	30
2-Hexanone	ND	ND	ug/kg	NC	30
Ethyl methacrylate	ND	ND	ug/kg	NC	30
Acrolein	ND	ND	ug/kg	NC	30
Acrylonitrile	ND	ND	ug/kg	NC	30
Bromochloromethane	ND	ND	ug/kg	NC	30
Tetrahydrofuran	ND	ND	ug/kg	NC	30
2,2-Dichloropropane	ND	ND	ug/kg	NC	30
1,2-Dibromoethane	ND	ND	ug/kg	NC	30
1,3-Dichloropropane	ND	ND	ug/kg	NC	30
1,1,1,2-Tetrachloroethane	ND	ND	ug/kg	NC	30
Bromobenzene	ND	ND	ug/kg	NC	30
n-Butylbenzene	ND	ND	ug/kg	NC	30
sec-Butylbenzene	ND	ND	ug/kg	NC	30
tert-Butylbenzene	ND	ND	ug/kg	NC	30
o-Chlorotoluene	ND	ND	ug/kg	NC	30
p-Chlorotoluene	ND	ND	ug/kg	NC	30
1,2-Dibromo-3-chloropropane	ND	ND	ug/kg	NC	30
Hexachlorobutadiene	ND	ND	ug/kg	NC	30
Isopropylbenzene	ND	ND	ug/kg	NC	30
p-Isopropyltoluene	ND	ND	ug/kg	NC	30
Naphthalene	ND	ND	ug/kg	NC	30
n-Propylbenzene	ND	ND	ug/kg	NC	30
1,2,3-Trichlorobenzene	ND	ND	ug/kg	NC	30
1,2,4-Trichlorobenzene	ND	ND	ug/kg	NC	30
1,3,5-Trimethylbenzene	ND	ND	ug/kg	NC	30
1,2,4-Trimethylbenzene	ND	ND	ug/kg	NC	30
trans-1,4-Dichloro-2-butene	ND	ND	ug/kg	NC	30
Ethyl ether	ND	ND	ug/kg	NC	30

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0601928

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organics 8260 via Low 5035 for sample(s) 01-05,11 (L0601928-05, WG229839-1)					
Surrogate(s)	Recovery				QC Criteria
1,2-Dichloroethane-d4	106	106	%		70-130
Toluene-d8	98.0	98.0	%		70-130
4-Bromofluorobenzene	98.0	98.0	%		70-130
Dibromofluoromethane	109	110	%		70-130

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0601928**

<b>Parameter</b>	<b>% Recovery</b>	<b>QC Criteria</b>
------------------	-------------------	--------------------

Total Metals LCS for sample(s) 06-10 (WG229676-4)

Antimony, Total	90	70-140
Arsenic, Total	102	70-140
Beryllium, Total	90	70-140
Cadmium, Total	103	70-140
Chromium, Total	93	70-140
Copper, Total	87	70-140
Lead, Total	103	70-140
Nickel, Total	90	70-140
Selenium, Total	104	70-140
Silver, Total	92	70-140
Thallium, Total	102	70-140
Zinc, Total	90	70-140

Total Metals LCS for sample(s) 06-10 (WG229537-1)

Mercury, Total	105	85-115
----------------	-----	--------

Volatile Organics 8260 via Low 5035 LCS for sample(s) 01,03,11 (WG229839-2)

Chlorobenzene	107	60-133
Benzene	101	66-142
Toluene	102	59-139
1,1-Dichloroethene	97	59-172
Trichloroethene	106	62-137

Surrogate(s)

1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130
Dibromofluoromethane	108	70-130

Volatile Organics 8260 via Low 5035 LCS for sample(s) 04-05 (WG229839-4)

Chlorobenzene	108	60-133
Benzene	103	66-142
Toluene	105	59-139
1,1-Dichloroethene	98	59-172
Trichloroethene	107	62-137

Surrogate(s)

1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130
Dibromofluoromethane	105	70-130

Volatile Organics 8260 via Low 5035 LCS for sample(s) 02 (WG229839-6)

Chlorobenzene	103	60-133
Benzene	99	66-142
Toluene	101	59-139
1,1-Dichloroethene	96	59-172
Trichloroethene	102	62-137

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0601928

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics 8260 via Low 5035 LCS for sample(s) 02 (WG229839-6)		
Surrogate(s)		
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	94	70-130
Dibromofluoromethane	102	70-130
SVOC's by GC/MS 8270 LCS for sample(s) 01-05 (WG229660-2)		
Acenaphthene	52	31-137
1,2,4-Trichlorobenzene	47	38-107
2-Chloronaphthalene	60	40-140
1,2-Dichlorobenzene	46	40-140
1,4-Dichlorobenzene	45	28-104
2,4-Dinitrotoluene	109	28-89
2,6-Dinitrotoluene	126	40-140
Fluoranthene	75	40-140
4-Chlorophenyl phenyl ether	62	40-140
n-Nitrosodi-n-propylamine	52	41-126
Butyl benzyl phthalate	86	40-140
Anthracene	72	40-140
Pyrene	72	35-142
Hexachloropropene	62	40-140
P-Chloro-M-Cresol	74	26-103
2-Chlorophenol	54	25-102
2-Nitrophenol	61	30-130
4-Nitrophenol	87	11-114
2,4-Dinitrophenol	49	30-130
Pentachlorophenol	69	17-109
Phenol	57	26-90
Surrogate(s)		
2-Fluorophenol	52	25-120
Phenol-d6	73	10-120
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	55	30-120
2,4,6-Tribromophenol	63	19-120
4-Terphenyl-d14	72	18-120
PAH by GC/MS SIM 8270M LCS for sample(s) 01-05 (WG229659-2)		
Acenaphthene	60	40-140
2-Chloronaphthalene	65	40-140
Fluoranthene	82	40-140
Anthracene	82	40-140
Pyrene	87	40-140
Pentachlorophenol	43	40-140

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0601928

Continued

Parameter	% Recovery	QC Criteria
-----------	------------	-------------

PAH by GC/MS SIM 8270M LCS for sample(s) 01-05 (WG229659-2)

Surrogate(s)		
2-Fluorophenol	56	25-120
Phenol-d6	71	10-120
Nitrobenzene-d5	59	23-120
2-Fluorobiphenyl	53	30-120
2,4,6-Tribromophenol	58	19-120
4-Terphenyl-d14	55	18-120

Total Metals SPIKE for sample(s) 06-10 (L0601958-02, WG229676-2)

Antimony, Total	85	70-140
Arsenic, Total	76	70-140
Beryllium, Total	98	70-140
Cadmium, Total	109	70-140
Chromium, Total	45	70-140
Copper, Total	62	70-140
Lead, Total	103	70-140
Nickel, Total	71	70-140
Selenium, Total	87	70-140
Silver, Total	89	70-140
Thallium, Total	102	70-140
Zinc, Total	58	70-140

Total Metals SPIKE for sample(s) 06-10 (L0601943-02, WG229537-2)

Mercury, Total	106	70-130
----------------	-----	--------

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH MS/MSD ANALYSIS**

**Laboratory Job Number: L0601928**

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
SVOC's by GC/MS 8270 for sample(s) 01-05 (L0601928-02, WG229660-4)					
Acenaphthene	56	51	9	50	31-137
1,2,4-Trichlorobenzene	50	46	8	50	38-107
2-Chloronaphthalene	64	58	10	50	40-140
1,2-Dichlorobenzene	50	44	13	50	40-140
1,4-Dichlorobenzene	46	43	7	50	28-104
2,4-Dinitrotoluene	110	110	0	50	28-89
2,6-Dinitrotoluene	130	130	0	50	40-140
Fluoranthene	77	77	0	50	40-140
4-Chlorophenyl phenyl ether	68	61	11	50	40-140
n-Nitrosodi-n-propylamine	54	50	8	50	41-126
Butyl benzyl phthalate	86	87	1	50	40-140
Anthracene	74	71	4	50	40-140
Pyrene	74	74	0	50	35-142
Hexachloropropene	66	56	16	50	40-140
p-Chloro-M-Cresol	78	71	9	50	26-103
2-Chlorophenol	58	53	9	50	25-102
2-Nitrophenol	64	58	10	50	30-130
4-Nitrophenol	93	86	8	50	11-114
2,4-Dinitrophenol	39	21	60	50	30-130
Pentachlorophenol	63	56	12	50	17-109
Phenol	61	57	7	50	26-90
Surrogate(s)					
2-Fluorophenol	54	48	12		25-120
Phenol-d6	75	69	8		10-120
Nitrobenzene-d5	68	62	9		23-120
2-Fluorobiphenyl	57	52	9		30-120
2,4,6-Tribromophenol	56	48	15		19-120
4-Terphenyl-d14	71	72	1		18-120
PAH by GC/MS SIM 8270M for sample(s) 01-05 (L0601928-02, WG229659-4)					
Acenaphthene	51	41	22	50	40-140
2-Chloronaphthalene	58	44	27	50	40-140
Fluoranthene	71	51	33	50	40-140
Anthracene	78	68	14	50	40-140
Pyrene	80	60	29	50	40-140
Pentachlorophenol	53	38	33	50	40-140
Surrogate(s)					
2-Fluorophenol	67	52	25		25-120
Phenol-d6	81	63	25		10-120
Nitrobenzene-d5	72	56	25		23-120
2-Fluorobiphenyl	56	45	22		30-120
2,4,6-Tribromophenol	58	45	25		19-120
4-Terphenyl-d14	55	53	4		18-120

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0601928

Continued

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Polychlorinated Biphenyls for sample(s) 06 (L0601912-01, WG229542-5)					
Aroclor 1242/1016	86	76	11	50	40-140
Aroclor 1260	76	65	15	50	40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	73	71	3		30-150
Decachlorobiphenyl	76	75	1		30-150



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

**Laboratory Job Number: L0601928**

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 06-10 (WG229676-3)						
Total Metals				1 3051		
Antimony, Total	ND	mg/kg	2.0	1 6010B	0214 16:40 0215 12:34	RW
Arsenic, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Beryllium, Total	ND	mg/kg	0.20	1 6010B	0214 16:40 0215 12:34	RW
Cadmium, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Chromium, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Copper, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Lead, Total	ND	mg/kg	2.0	1 6010B	0214 16:40 0215 12:34	RW
Nickel, Total	ND	mg/kg	1.0	1 6010B	0214 16:40 0215 12:34	RW
Selenium, Total	ND	mg/kg	0.80	1 6010B	0214 16:40 0215 12:34	RW
Silver, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Thallium, Total	ND	mg/kg	0.40	1 6010B	0214 16:40 0215 12:34	RW
Zinc, Total	ND	mg/kg	2.0	1 6010B	0214 16:40 0215 12:34	RW
Blank Analysis for sample(s) 06-10 (WG229537-4)						
Total Metals						
Mercury, Total	ND	mg/kg	0.08	1 7471A	0213 21:30 0214 15:36	DM
Blank Analysis for sample(s) 01,03,11 (WG229839-3)						
Volatile Organics 8260 via Low 5035				1 8260B	0214 10:43	PD
Methylene chloride	ND	ug/kg	10.			
1,1-Dichloroethane	ND	ug/kg	1.5			
Chloroform	ND	ug/kg	1.5			
Carbon tetrachloride	ND	ug/kg	1.0			
1,2-Dichloropropane	ND	ug/kg	3.5			
Dibromochloromethane	ND	ug/kg	1.0			
1,1,2-Trichloroethane	ND	ug/kg	1.5			
Tetrachloroethene	ND	ug/kg	1.0			
Chlorobenzene	ND	ug/kg	1.0			
Trichlorofluoromethane	ND	ug/kg	5.0			
1,2-Dichloroethane	ND	ug/kg	1.0			
1,1,1-Trichloroethane	ND	ug/kg	1.0			
Bromodichloromethane	ND	ug/kg	1.0			
trans-1,3-Dichloropropene	ND	ug/kg	1.0			
cis-1,3-Dichloropropene	ND	ug/kg	1.0			
1,1-Dichloropropene	ND	ug/kg	5.0			
Bromoform	ND	ug/kg	4.0			
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0			
Benzene	ND	ug/kg	1.0			
Toluene	ND	ug/kg	1.5			
Ethylbenzene	ND	ug/kg	1.0			
Chloromethane	ND	ug/kg	5.0			
Bromomethane	ND	ug/kg	2.0			
Vinyl chloride	ND	ug/kg	2.0			
Chloroethane	ND	ug/kg	2.0			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01,03,11 (WG229839-3)							
Volatile Organics 8260 via Low 5035 cont'd				1	8260B		0214 10:43 PD
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	2.0				
o-Xylene	ND	ug/kg	2.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	2.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				
2-Hexanone	ND	ug/kg	10.				
Ethyl methacrylate	ND	ug/kg	10.				
Acrolein	ND	ug/kg	25.				
Acrylonitrile	ND	ug/kg	10.				
Bromochloromethane	ND	ug/kg	5.0				
Tetrahydrofuran	ND	ug/kg	20.				
2,2-Dichloropropane	ND	ug/kg	5.0				
1,2-Dibromoethane	ND	ug/kg	4.0				
1,3-Dichloropropane	ND	ug/kg	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0				
Bromobenzene	ND	ug/kg	5.0				
n-Butylbenzene	ND	ug/kg	1.0				
sec-Butylbenzene	ND	ug/kg	1.0				
tert-Butylbenzene	ND	ug/kg	5.0				
o-Chlorotoluene	ND	ug/kg	5.0				
p-Chlorotoluene	ND	ug/kg	5.0				
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0				
Hexachlorobutadiene	ND	ug/kg	5.0				
Isopropylbenzene	ND	ug/kg	1.0				
p-Isopropyltoluene	ND	ug/kg	1.0				
Naphthalene	ND	ug/kg	5.0				
n-Propylbenzene	ND	ug/kg	1.0				
1,2,3-Trichlorobenzene	ND	ug/kg	5.0				
1,2,4-Trichlorobenzene	ND	ug/kg	5.0				
1,3,5-Trimethylbenzene	ND	ug/kg	5.0				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP      ANAL	ID
Blank Analysis for sample(s) 01,03,11 (WG229839-3)						
Volatile Organics 8260 via Low 5035 cont'd				1 8260B		0214 10:43 PD
1,2,4-Trimethylbenzene	ND	ug/kg	5.0			
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0			
Ethyl ether	ND	ug/kg	5.0			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	117	%	70-130			
Toluene-d8	101	%	70-130			
4-Bromofluorobenzene	100	%	70-130			
Dibromofluoromethane	110	%	70-130			
Blank Analysis for sample(s) 04-05 (WG229839-5)						
Volatile Organics 8260 via Low 5035				1 8260B		0215 08:19 PD
Methylene chloride	ND	ug/kg	10.			
1,1-Dichloroethane	ND	ug/kg	1.5			
Chloroform	ND	ug/kg	1.5			
Carbon tetrachloride	ND	ug/kg	1.0			
1,2-Dichloropropane	ND	ug/kg	3.5			
Dibromochloromethane	ND	ug/kg	1.0			
1,1,2-Trichloroethane	ND	ug/kg	1.5			
Tetrachloroethene	ND	ug/kg	1.0			
Chlorobenzene	ND	ug/kg	1.0			
Trichlorofluoromethane	ND	ug/kg	5.0			
1,2-Dichloroethane	ND	ug/kg	1.0			
1,1,1-Trichloroethane	ND	ug/kg	1.0			
Bromodichloromethane	ND	ug/kg	1.0			
trans-1,3-Dichloropropene	ND	ug/kg	1.0			
cis-1,3-Dichloropropene	ND	ug/kg	1.0			
1,1-Dichloropropene	ND	ug/kg	5.0			
Bromoform	ND	ug/kg	4.0			
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0			
Benzene	ND	ug/kg	1.0			
Toluene	ND	ug/kg	1.5			
Ethylbenzene	ND	ug/kg	1.0			
Chloromethane	ND	ug/kg	5.0			
Bromomethane	ND	ug/kg	2.0			
Vinyl chloride	ND	ug/kg	2.0			
Chloroethane	ND	ug/kg	2.0			
1,1-Dichloroethene	ND	ug/kg	1.0			
trans-1,2-Dichloroethene	ND	ug/kg	1.5			
Trichloroethene	ND	ug/kg	1.0			
1,2-Dichlorobenzene	ND	ug/kg	5.0			
1,3-Dichlorobenzene	ND	ug/kg	5.0			
1,4-Dichlorobenzene	ND	ug/kg	5.0			
Methyl tert butyl ether	ND	ug/kg	2.0			
p/m-Xylene	ND	ug/kg	2.0			
o-Xylene	ND	ug/kg	2.0			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP      ANAL	ID
Blank Analysis for sample(s) 04-05 (WG229839-5)						
Volatile Organics 8260 via Low 5035 cont'd				1 8260B	0215 08:19 PD	
cis-1,2-Dichloroethene	ND	ug/kg	1.0			
Dibromomethane	ND	ug/kg	10.			
1,4-Dichlorobutane	ND	ug/kg	10.			
Iodomethane	ND	ug/kg	10.			
1,2,3-Trichloropropane	ND	ug/kg	10.			
Styrene	ND	ug/kg	2.0			
Dichlorodifluoromethane	ND	ug/kg	10.			
Acetone	ND	ug/kg	10.			
Carbon disulfide	ND	ug/kg	10.			
2-Butanone	ND	ug/kg	10.			
Vinyl acetate	ND	ug/kg	10.			
4-Methyl-2-pentanone	ND	ug/kg	10.			
2-Hexanone	ND	ug/kg	10.			
Ethyl methacrylate	ND	ug/kg	10.			
Acrolein	ND	ug/kg	25.			
Acrylonitrile	ND	ug/kg	10.			
Bromochloromethane	ND	ug/kg	5.0			
Tetrahydrofuran	ND	ug/kg	20.			
2,2-Dichloropropane	ND	ug/kg	5.0			
1,2-Dibromoethane	ND	ug/kg	4.0			
1,3-Dichloropropane	ND	ug/kg	5.0			
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0			
Bromobenzene	ND	ug/kg	5.0			
n-Butylbenzene	ND	ug/kg	1.0			
sec-Butylbenzene	ND	ug/kg	1.0			
tert-Butylbenzene	ND	ug/kg	5.0			
o-Chlorotoluene	ND	ug/kg	5.0			
p-Chlorotoluene	ND	ug/kg	5.0			
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0			
Hexachlorobutadiene	ND	ug/kg	5.0			
Isopropylbenzene	ND	ug/kg	1.0			
p-Isopropyltoluene	ND	ug/kg	1.0			
Naphthalene	ND	ug/kg	5.0			
n-Propylbenzene	ND	ug/kg	1.0			
1,2,3-Trichlorobenzene	ND	ug/kg	5.0			
1,2,4-Trichlorobenzene	ND	ug/kg	5.0			
1,3,5-Trimethylbenzene	ND	ug/kg	5.0			
1,2,4-Trimethylbenzene	ND	ug/kg	5.0			
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0			
Ethyl ether	ND	ug/kg	5.0			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	114	%	70-130			
Toluene-d8	98.0	%	70-130			
4-Bromofluorobenzene	95.0	%	70-130			
Dibromofluoromethane	112	%	70-130			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 02 (WG229839-7)							
Volatile Organics 8260 via Low 5035				1 8260B		0216 13:26 PD	
Methylene chloride	ND	ug/kg	10.				
1,1-Dichloroethane	ND	ug/kg	1.5				
Chloroform	ND	ug/kg	1.5				
Carbon tetrachloride	ND	ug/kg	1.0				
1,2-Dichloropropane	ND	ug/kg	3.5				
Dibromochloromethane	ND	ug/kg	1.0				
1,1,2-Trichloroethane	ND	ug/kg	1.5				
Tetrachloroethene	ND	ug/kg	1.0				
Chlorobenzene	ND	ug/kg	1.0				
Trichlorofluoromethane	ND	ug/kg	5.0				
1,2-Dichloroethane	ND	ug/kg	1.0				
1,1,1-Trichloroethane	ND	ug/kg	1.0				
Bromodichloromethane	ND	ug/kg	1.0				
trans-1,3-Dichloropropene	ND	ug/kg	1.0				
cis-1,3-Dichloropropene	ND	ug/kg	1.0				
1,1-Dichloropropene	ND	ug/kg	5.0				
Bromoform	ND	ug/kg	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0				
Benzene	ND	ug/kg	1.0				
Toluene	ND	ug/kg	1.5				
Ethylbenzene	ND	ug/kg	1.0				
Chloromethane	ND	ug/kg	5.0				
Bromomethane	ND	ug/kg	2.0				
Vinyl chloride	ND	ug/kg	2.0				
Chloroethane	ND	ug/kg	2.0				
1,1-Dichloroethene	ND	ug/kg	1.0				
trans-1,2-Dichloroethene	ND	ug/kg	1.5				
Trichloroethene	ND	ug/kg	1.0				
1,2-Dichlorobenzene	ND	ug/kg	5.0				
1,3-Dichlorobenzene	ND	ug/kg	5.0				
1,4-Dichlorobenzene	ND	ug/kg	5.0				
Methyl tert butyl ether	ND	ug/kg	2.0				
p/m-Xylene	ND	ug/kg	2.0				
o-Xylene	ND	ug/kg	2.0				
cis-1,2-Dichloroethene	ND	ug/kg	1.0				
Dibromomethane	ND	ug/kg	10.				
1,4-Dichlorobutane	ND	ug/kg	10.				
Iodomethane	ND	ug/kg	10.				
1,2,3-Trichloropropane	ND	ug/kg	10.				
Styrene	ND	ug/kg	2.0				
Dichlorodifluoromethane	ND	ug/kg	10.				
Acetone	ND	ug/kg	10.				
Carbon disulfide	ND	ug/kg	10.				
2-Butanone	ND	ug/kg	10.				
Vinyl acetate	ND	ug/kg	10.				
4-Methyl-2-pentanone	ND	ug/kg	10.				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 02 (WG229839-7)						
Volatile Organics 8260 via Low 5035 cont'd				1 8260B	0216 13:26 PD	
2-Hexanone	ND	ug/kg	10.			
Ethyl methacrylate	ND	ug/kg	10.			
Acrolein	ND	ug/kg	25.			
Acrylonitrile	ND	ug/kg	10.			
Bromochloromethane	ND	ug/kg	5.0			
Tetrahydrofuran	ND	ug/kg	20.			
2,2-Dichloropropane	ND	ug/kg	5.0			
1,2-Dibromoethane	ND	ug/kg	4.0			
1,3-Dichloropropane	ND	ug/kg	5.0			
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.0			
Bromobenzene	ND	ug/kg	5.0			
n-Butylbenzene	ND	ug/kg	1.0			
sec-Butylbenzene	ND	ug/kg	1.0			
tert-Butylbenzene	ND	ug/kg	5.0			
o-Chlorotoluene	ND	ug/kg	5.0			
p-Chlorotoluene	ND	ug/kg	5.0			
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0			
Hexachlorobutadiene	ND	ug/kg	5.0			
Isopropylbenzene	ND	ug/kg	1.0			
p-Isopropyltoluene	ND	ug/kg	1.0			
Naphthalene	ND	ug/kg	5.0			
n-Propylbenzene	ND	ug/kg	1.0			
1,2,3-Trichlorobenzene	ND	ug/kg	5.0			
1,2,4-Trichlorobenzene	ND	ug/kg	5.0			
1,3,5-Trimethylbenzene	ND	ug/kg	5.0			
1,2,4-Trimethylbenzene	ND	ug/kg	5.0			
trans-1,4-Dichloro-2-butene	ND	ug/kg	5.0			
Ethyl ether	ND	ug/kg	5.0			
Surrogate(s)	Recovery		QC Criteria			
1,2-Dichloroethane-d4	112	%	70-130			
Toluene-d8	100	%	70-130			
4-Bromofluorobenzene	97.0	%	70-130			
Dibromofluoromethane	113	%	70-130			
Blank Analysis for sample(s) 01-05 (WG229660-1)						
SVOC's by GC/MS 8270				1 8270C	0214 18:25 0216 15:30 RL	
Acenaphthene	ND	ug/kg	330			
Benzidine	ND	ug/kg	3300			
1,2,4-Trichlorobenzene	ND	ug/kg	330			
Hexachlorobenzene	ND	ug/kg	330			
Bis(2-chloroethyl)ether	ND	ug/kg	330			
1-Chloronaphthalene	ND	ug/kg	330			
2-Chloronaphthalene	ND	ug/kg	400			
1,2-Dichlorobenzene	ND	ug/kg	330			
1,3-Dichlorobenzene	ND	ug/kg	330			

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-05 (WG229660-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25	0216 15:30	RL
1,4-Dichlorobenzene	ND	ug/kg	330				
3,3'-Dichlorobenzidine	ND	ug/kg	670				
2,4-Dinitrotoluene	ND	ug/kg	330				
2,6-Dinitrotoluene	ND	ug/kg	330				
Azobenzene	ND	ug/kg	330				
Fluoranthene	ND	ug/kg	330				
4-Chlorophenyl phenyl ether	ND	ug/kg	330				
4-Bromophenyl phenyl ether	ND	ug/kg	330				
Bis(2-chloroisopropyl)ether	ND	ug/kg	330				
Bis(2-chloroethoxy)methane	ND	ug/kg	330				
Hexachlorobutadiene	ND	ug/kg	670				
Hexachlorocyclopentadiene	ND	ug/kg	670				
Hexachloroethane	ND	ug/kg	330				
Isophorone	ND	ug/kg	330				
Naphthalene	ND	ug/kg	330				
Nitrobenzene	ND	ug/kg	330				
NDPA/DPA	ND	ug/kg	1000				
n-Nitrosodi-n-propylamine	ND	ug/kg	330				
Bis(2-ethylhexyl)phthalate	ND	ug/kg	670				
Butyl benzyl phthalate	ND	ug/kg	330				
Di-n-butylphthalate	ND	ug/kg	330				
Di-n-octylphthalate	ND	ug/kg	330				
Diethyl phthalate	ND	ug/kg	330				
Dimethyl phthalate	ND	ug/kg	330				
Benzo(a)anthracene	ND	ug/kg	330				
Benzo(a)pyrene	ND	ug/kg	330				
Benzo(b)fluoranthene	ND	ug/kg	330				
Benzo(k)fluoranthene	ND	ug/kg	330				
Chrysene	ND	ug/kg	330				
Acenaphthylene	ND	ug/kg	330				
Anthracene	ND	ug/kg	330				
Benzo(ghi)perylene	ND	ug/kg	330				
Fluorene	ND	ug/kg	330				
Phenanthrene	ND	ug/kg	330				
Dibenzo(a,h)anthracene	ND	ug/kg	330				
Indeno(1,2,3-cd)pyrene	ND	ug/kg	330				
Pyrene	ND	ug/kg	330				
Benzo(e)pyrene	ND	ug/kg	330				
Biphenyl	ND	ug/kg	330				
Perylene	ND	ug/kg	330				
Aniline	ND	ug/kg	670				
4-Chloroaniline	ND	ug/kg	330				
1-Methylnaphthalene	ND	ug/kg	330				
2-Nitroaniline	ND	ug/kg	330				
3-Nitroaniline	ND	ug/kg	330				
4-Nitroaniline	ND	ug/kg	470				

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-05 (WG229660-1)							
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25	0216 15:30	RL
Dibenzofuran	ND	ug/kg	330				
a,a-Dimethylphenethylamine	ND	ug/kg	3300				
Hexachloropropene	ND	ug/kg	670				
Nitrosodi-n-butylamine	ND	ug/kg	670				
2-Methylnaphthalene	ND	ug/kg	330				
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	1300				
Pentachlorobenzene	ND	ug/kg	1300				
a-Naphthylamine	ND	ug/kg	1300				
b-Naphthylamine	ND	ug/kg	1300				
Phenacetin	ND	ug/kg	670				
Dimethoate	ND	ug/kg	1300				
4-Aminobiphenyl	ND	ug/kg	670				
Pentachloronitrobenzene	ND	ug/kg	670				
Isodrin	ND	ug/kg	670				
p-Dimethylaminoazobenzene	ND	ug/kg	670				
Chlorobenzilate	ND	ug/kg	1300				
3-Methylcholanthrene	ND	ug/kg	1300				
Ethyl Methanesulfonate	ND	ug/kg	1000				
Acetophenone	ND	ug/kg	1300				
Nitrosodipiperidine	ND	ug/kg	1300				
7,12-Dimethylbenz(a)anthracene	ND	ug/kg	670				
n-Nitrosodimethylamine	ND	ug/kg	3300				
2,4,6-Trichlorophenol	ND	ug/kg	330				
p-Chloro-m-cresol	ND	ug/kg	330				
2-Chlorophenol	ND	ug/kg	400				
2,4-Dichlorophenol	ND	ug/kg	670				
2,4-Dimethylphenol	ND	ug/kg	330				
2-Nitrophenol	ND	ug/kg	1300				
4-Nitrophenol	ND	ug/kg	670				
2,4-Dinitrophenol	ND	ug/kg	1300				
4,6-Dinitro-o-cresol	ND	ug/kg	1300				
Pentachlorophenol	ND	ug/kg	1300				
Phenol	ND	ug/kg	470				
2-Methylphenol	ND	ug/kg	400				
3-Methylphenol/4-Methylphenol	ND	ug/kg	400				
2,4,5-Trichlorophenol	ND	ug/kg	330				
2,6-Dichlorophenol	ND	ug/kg	670				
Benzoic Acid	ND	ug/kg	3300				
Benzyl Alcohol	ND	ug/kg	670				
Carbazole	ND	ug/kg	330				
Pyridine	ND	ug/kg	3300				
2-Picoline	ND	ug/kg	1300				
Pronamide	ND	ug/kg	1300				
Methyl methanesulfonate	ND	ug/kg	1300				



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Blank Analysis for sample(s) 01-05 (WG229660-1)						
SVOC's by GC/MS 8270 cont'd				1 8270C	0214 18:25 0216 15:30 RL	
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	69.0	%	25-120			
Phenol-d6	96.0	%	10-120			
Nitrobenzene-d5	83.0	%	23-120			
2-Fluorobiphenyl	64.0	%	30-120			
2,4,6-Tribromophenol	67.0	%	19-120			
4-Terphenyl-d14	87.0	%	18-120			
Blank Analysis for sample(s) 01-05 (WG229659-1)						
PAH by GC/MS SIM 8270M				1 8270C-M	0214 18:25 0216 13:40 RL	
Acenaphthene	ND	ug/kg	13.			
2-Chloronaphthalene	ND	ug/kg	13.			
Fluoranthene	ND	ug/kg	13.			
Hexachlorobutadiene	ND	ug/kg	33.			
Naphthalene	ND	ug/kg	13.			
Benzo(a)anthracene	ND	ug/kg	13.			
Benzo(a)pyrene	ND	ug/kg	13.			
Benzo(b)fluoranthene	ND	ug/kg	13.			
Benzo(k)fluoranthene	ND	ug/kg	13.			
Chrysene	ND	ug/kg	13.			
Acenaphthylene	ND	ug/kg	13.			
Anthracene	ND	ug/kg	13.			
Benzo(ghi)perylene	ND	ug/kg	13.			
Fluorene	ND	ug/kg	13.			
Phenanthrene	ND	ug/kg	13.			
Dibenzo(a,h)anthracene	ND	ug/kg	13.			
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	13.			
Pyrene	ND	ug/kg	13.			
1-Methylnaphthalene	ND	ug/kg	13.			
2-Methylnaphthalene	ND	ug/kg	13.			
Pentachlorophenol	ND	ug/kg	53.			
Hexachlorobenzene	ND	ug/kg	53.			
Perylene	ND	ug/kg	13.			
Biphenyl	ND	ug/kg	13.			
2,6-Dimethylnaphthalene	ND	ug/kg	13.			
1-Methylphenanthrene	ND	ug/kg	13.			
Benzo(e)Pyrene	ND	ug/kg	13.			
Hexachloroethane	ND	ug/kg	53.			
Surrogate(s)	Recovery		QC Criteria			
2-Fluorophenol	60.0	%	25-120			
Phenol-d6	75.0	%	10-120			
Nitrobenzene-d5	65.0	%	23-120			
2-Fluorobiphenyl	60.0	%	30-120			
2,4,6-Tribromophenol	59.0	%	19-120			
4-Terphenyl-d14	57.0	%	18-120			

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0601928

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 06 (WG229542-1)							
Polychlorinated Biphenyls				1 8082	0214 02:00	0216 18:47	SS
Aroclor 1221	ND	ug/kg	33.3				
Aroclor 1232	ND	ug/kg	33.3				
Aroclor 1242/1016	ND	ug/kg	33.3				
Aroclor 1248	ND	ug/kg	33.3				
Aroclor 1254	ND	ug/kg	33.3				
Aroclor 1260	ND	ug/kg	33.3				
Surrogate(s)	Recovery		QC Criteria				
2,4,5,6-Tetrachloro-m-xylene	82.0	%	30-150				
Decachlorobiphenyl	90.0	%	30-150				

**ALPHA ANALYTICAL LABORATORIES**  
**ADDENDUM I**

---

**REFERENCES**

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

**GLOSSARY OF TERMS AND SYMBOLS**

REF        Reference number in which test method may be found.  
METHOD    Method number by which analysis was performed.  
ID         Initials of the analyst.  
ND         Not detected in comparison to the reported detection limit.  
NI         Not Ignitable.  
ug/cart    Micrograms per Cartridge.

**LIMITATION OF LIABILITIES**

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.



# CHAIN OF CUSTODY

PAGE 1 OF 2

Eight Walkup Drive Westborough, MA 01581  
TEL 508-898-9220 FAX: 508-898-9193

## Client Information

Client: Tighe + Bond  
Address: 130 Southampton Rd  
Westfield, MA  
Phone: 413-572-3271  
Fax: 413-568-9764  
Email: jimperry@tighebond.com  
☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: US Tsubaki  
Project Location: Bennington, VT  
Project #: B-360-3-69  
Project Manager: PG-B  
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 2/17/06 Time:

Date Rec'd in Lab: 2/10/06

ALPHA Job #: LO601928

## Report Information - Data Deliverables

☐ FAX ☒ EMAIL  
☐ ADEx ☐ Add'l Deliverables

## Billing Information

☐ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State /Fed Program: Vermont Criteria: EPA Region 9 PRG's (residential + ind.)

## MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☐ No Are MCP Analytical Methods Required?  
☐ Yes ☐ No Are Drinking Water Samples Submitted?  
☐ Yes ☐ No Have you met minimum field QC requirements?

**ANALYSIS**  
VOC 8260  
Semi-VOC 8270  
TPH 13 Mergis  
PCB's

**SAMPLE HANDLING**  
Filtration  
☐ Done  
☐ Not needed  
Preservation  
☐ Lab to do  
☐ Lab to do  
(Please specify below)

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Sample Specific Comments									
		Date	Time												
LO601928-01	B-1 (0'-5')	2/9/06	1200	S	JMP	X	X								
02	MW-1 (1B) (0'-5')	2/9/06	1200	S	JMP	X	X								
03	B-1 (5'-10')	2/9/06	1200	S	JMP	X	X								
04	B-5 (5'-10')	2/9/06	1200	S	JMP	X	X								
05	MW-1 (1B) (5'-10')	2/9/06	1200	S	JMP	X	X								
06	B-3 (0'-5')	2/9/06	1200	S	JMP			X	X						
07	B-6 (5'-10')	2/9/06	1200	S	JMP			X							
08	MW-2 (1B) (0'-5')	2/9/06	1200	S	JMP			X							
09	B-5 (0'-5')	2/9/06	1200	S	JMP			X							
10	B-4 (5'-10')	2/9/06	1200	S	JMP			X							

## QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type: G G G F  
Preservative:

Relinquished By:

Date/Time

Received By:

Date/Time

Don M  
EP Butler

2/10/06 1000  
2/10/06 15:30

Ed Butler  
Gary Kirsch

2/10/06 13:30  
2/10/06 15:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.



US Tsubaki

RY: 2003

Product Name	2003			
	Maximum Amount Stored	Average Amount Stored	Annual Usage	Units
Argon	1428 cu ft	357 cu ft		cu ft
Black Magic Infusion	1,358	370		lbs
Metal Guard 480	763	381		lbs
Pen Dip 300	371	169		lbs
Propane	21,200	10,600	22,450	lbs
Syntilo 9930	1,739	579		lbs
Uni Kleen 58	575	250		lbs
1E1951H Medium Gloss Black	200	500		lbs
<b>Metals</b>				
Plate			163,983	
Bar			1,092,495	

RY: 2003

[illegible]

Facility Name: U S. Tsubaki, Inc.

\*\*\*\*\*  
\*\*\*\*\*

FACILITY IDENTIFICATION:

U.S. Tsubaki, Inc.  
Dept:  
222 Bowen Road  
Bennington, VT 05201-2017 USA  
County: Bennington  
Number of employees: 72

IDENTIFICATION NUMBERS:

SIC: 3499  
Dun & Bradstreet: NA

CONTACT INFORMATION:

Spencer, Gary  
Title: General Manager Contact Type 1: Emergency Contact Contact Type 2: Owner / Operator  
Address: 222 Bowen Road, Bennington, VT, 05201-2017 USA  
Phones: Work: 802-447-7561 24-hour: 413-458-1830

Brendese, Chuck  
Title: Facility Superintendent Contact Type 1: Emergency Contact  
Address: 222 Bowen Road, Bennington, VT, 05201-2017 USA  
Phones: 24-hour: 518-237-9186

CHEMICAL DESCRIPTIONS:

☐ All chemicals in inventory are identical to last year's submission

CHEM NAME: 1E1951 MH Medium Gloss Black  
CAS:

☐ Identical to previous year  
☐ TRADE SECRET  
☐ Pure ☒ Mix ☒ Solid ☐ Liquid ☐ Gas ☐ EHS

PHYSICAL & HEALTH HAZARDS:

☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)

INVENTORY:

Max Daily Amt code: 02 (100 - 999 pounds)  
Avg Daily Amt code: 01 (0 - 99 pounds)  
No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: K Pressure: 1 Temp: 4 Location: Factory floor, paint system Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Black Magic Infusion  
CAS:

☐ Identical to previous year  
☐ TRADE SECRET




Tier Two  
Emergency and Hazardous Chemical Inventory  
Specific Information by Chemical


Reporting Period: January 1 to December 31, 2004  
Page 2  
Printed: February 17, 2005

Facility Name: U S. Tsubaki, Inc.

☐ TRADE SECRET  
☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS  
PHYSICAL & HEALTH HAZARDS:  
☐ Fire ☐ Sudden Release of Pressure ☒ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)  
INVENTORY:  
Max Daily Amt code: 03 (1,000 - 9,999 pounds)  
Avg Daily Amt code: 02 (100 - 999 pounds)  
No. of days on-site: 196  
STORAGE CODES & STORAGE LOCATIONS:  
Container Type: E Pressure: 1 Temp: 4 Location: Factory floor, black oxide system Amount: pounds  
CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME:   
CAS: 7439-92-1  
☐ Identical to previous year  
☐ TRADE SECRET  
☒ Pure ☐ Mix ☒ Solid ☐ Liquid ☐ Gas ☐ EHS  
PHYSICAL & HEALTH HAZARDS:  
☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☒ Delayed (chronic)  
INVENTORY:  
Max Daily Amt code: 03 (1,000 - 9,999 pounds)  
Avg Daily Amt code: 03 (1,000 - 9,999 pounds)  
No. of days on-site: 196  
STORAGE CODES & STORAGE LOCATIONS:  
Container Type: R Pressure: 1 Temp: 4 Location: Industrial batteries Amount: pounds  
CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Metal Guard 480  
CAS:  
☐ Identical to previous year  
☐ TRADE SECRET  
☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS  
PHYSICAL & HEALTH HAZARDS:  
☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)  
INVENTORY:  
Max Daily Amt code: 02 (100 - 999 pounds)  
Avg Daily Amt code: 02 (100 - 999 pounds)  
No. of days on-site: 196  
STORAGE CODES & STORAGE LOCATIONS:  
Container Type: D Pressure: 1 Temp: 4 Location: Factory floor - finishing Amount: pounds  
CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Pen  300  
CAS:  
☐ Identical to previous year  
☐ TRADE SECRET  
☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS  
PHYSICAL & HEALTH HAZARDS:  
☒ Fire ☐ Sudden Release of Pressure ☒ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)  
INVENTORY:  
Max Daily Amt code: 02 (100 - 999 pounds)  
Avg Daily Amt code: 02 (100 - 999 pounds)

Tier Two  
Emergency and Hazardous Chemical Inventory  
Specific Information by Chemical

Reporting Period: January 1 to December 31, 2004  
Page 3  
Printed: February 17, 2005

Facility Name: U.S. Tsubaki, Inc.

Avg Daily Amt code: 02 (100 - 999 pounds)

No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: D Pressure: 1 Temp: 4 Location: Factory floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Propane

CAS: 74-98-6

☐ Identical to previous year

☐ TRADE SECRET

☒ Pure ☐ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS

PHYSICAL & HEALTH HAZARDS:

☒ Fire ☒ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)

INVENTORY:

Max Daily Amt code: 04 (10,000 - 99,999 pounds)

Avg Daily Amt code: 04 (10,000 - 99,999 pounds)

No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: A Pressure: 2 Temp: 4 Location: 5 - 1,000 gal tanks in the SE corner of the parking lot Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Sulfuric Acid

CAS: 7664-93-9

☐ Identical to previous year

☐ TRADE SECRET

☒ Pure ☐ Mix ☐ Solid ☒ Liquid ☐ Gas ☒ EHS

PHYSICAL & HEALTH HAZARDS:

☐ Fire ☐ Sudden Release of Pressure ☒ Reactivity ☒ Immediate (acute) ☒ Delayed (chronic)

INVENTORY:

Max Daily Amt code: 02 (100 - 999 pounds)

Avg Daily Amt code: 02 (100 - 999 pounds)

No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: R Pressure: 1 Temp: 4 Location: Industrial batteries Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

CHEM NAME: Syntilo 9930

CAS:

☐ Identical to previous year

☐ TRADE SECRET

☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS

PHYSICAL & HEALTH HAZARDS:

☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)

INVENTORY:

Max Daily Amt code: 03 (1,000 - 9,999 pounds)

Avg Daily Amt code: 02 (100 - 999 pounds)

No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: D Pressure: 1 Temp: 4 Location: Factory floor - coolant agent Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

Tier Two  
Emergency and Hazardous Chemical Inventory  
Specific Information by Chemical

Reporting Period: January 1 to December 31, 2004

Page 4

Printed: February 17, 2005

Facility Name: U.S. Tsubaki, Inc.

CHEM NAME: Uni Kleen 58

CAS:

☐ Identical to previous year

☐ TRADE SECRET

☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas ☐ EHS

PHYSICAL & HEALTH HAZARDS:

☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)

INVENTORY:

Max Daily Amt code: 02 (100 - 999 pounds)

Avg Daily Amt code: 02 (100 - 999 pounds)

No. of days on-site: 196

STORAGE CODES & STORAGE LOCATIONS:

Container Type: D Pressure: 1 Temp: 4 Location: Factory floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS: No additional chemical information is required by Vermont

FACILITY STATE FIELDS:

Vermont requests the following:

Record of reporting years, years reported: 2

STATE / LOCAL FEES: \$380

☐ I have attached a site plan

☐ I have attached a list of site coordinate abbreviations

☐ I have attached a description of dikes and other safeguard measures

**Certification (Read and sign after completing all sections)**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 4.

and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Tom Barton/Treasurer & General Council

2/28/2005

Name and official title of owner/operator  
OR owner/operator's authorized representative

Signature

Date signed

Blaser Swisslube Inc.  
31 Hatfield Lane, Goshen, New York • Tel. (845) 294-3200 • Fax (845) 294-3102

**Blaser.**  
SWISSLUBE

## MSDS Blasocut

### PRODUCT IDENTIFICATION

**Manufacturer:** Blaser Swisslube, Inc.  
31 Hatfield Lane  
Goshen, NY 10924  
USA

**Emergency phone number:** (845) 294-3200

**Product name:** Blasocut 2000 Universal Art. No. 870  
Blasocut 2000 Universal LP Art. No. 870LP  
Blasocut 2000 SW Art. No. 870SW

Blasocut 4000 Strong Art. No. 872  
Blasocut 4000 Strong LP Art. No. 872LP  
Blasocut 4000 SW Art. No. 872SW

**Product type:** Water-miscible mineral oil based metalworking fluid

**Prepared by:** OH & S Coordinator

**Date of issue:** April 7, 2005

**Supersedes:** Edition 1 of April 21, 2002

HMIS <sup>1</sup>	
Health	0
Fire	1
Reactivity	0

### PRODUCT COMPOSITION

Blasocut are tested, non-controlled (as defined by WHMIS), non-hazardous mixtures (as defined by 29 CFR 1910.1200) of:

Ingredient	%	CAS No:	Exposure Limits:
Severely hydrotreated mineral oil	45 - 46	84742-62-5	OSHA: 5mg/m <sup>3</sup>
Emulsifiers	30 - 45	66608-26-4 61790-44-1 61791-12-6	
Chlorinated paraffins (C <sub>12-20</sub> , less than 50% chlorine)	5 - 15	61788-78-9	
Polar additives	2 - 5	8016-28-2 61788-66-7	
Corrosion and fungi inhibitors	0.5 - 1		
Odorant	< 0.1		
Stabilizers Total	< 2		

*Na-benzoate, 2,3-pentandiol, 2-methyl, 2-propenol, 1-phenoxyl, Cs-ascorbate, alpha-Tocopherol, citric acid, tartaric acid, ascorbic acid, hexylpalmitate, cholethylsuccinate, 1-hydroxyethyl-2-oleyl-imidazoline, glycerin and odorant*

Blasocut do not contain as an ingredient: active sulfur, phenols, nitrites, formaldehyde or formaldehyde releasing substances, heavy metals (i.e. lead, mercury etc.), arsenic, PCB, PCT, TCDD or other dioxin related substances. Benzo(a)pyrene content less than 10 ppm (GC-MS method).

### EMERGENCY & FIRST AID PROCEDURES

**Skin contact:** Wash with plenty of soap and fresh water (good personal hygiene practices are sufficient). Remove any contaminated clothing and launder before reuse.

**Eye contact:** Rinse with plenty of fresh water for 20 minutes. Consult physician if necessary.

**Inhalation:** Remove to fresh air.

**Ingestion:** Do not induce vomiting, pulmonary aspiration hazard. Consult a physician without delay. If involuntary vomiting occurs, ensure that mouth is below hip level. Get medical attention.

### FIRE & EXPLOSION HAZARD DATA

**Flash point: (COC):** Art. 870: 270°F (132°C) Art. 872: 266°F (130°C)

**Auto ignition temperature:** 572°F (306°C)

**Explosion limits:** Not applicable

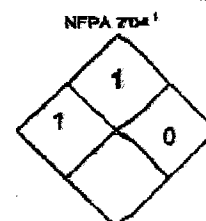
**Hazardous combustion products:** Oxides of carbon, nitrogen and traces of oxides of chlorine and sulfur, HCl.

**Products formed under abnormal conditions:** Thermal decomposition of the concentrate above 176°F may produce trace amounts of HCl.

**Special fire fighting procedures:** Cool exposed containers with water mist to prevent pressure build-up. Wear self-contained breathing apparatus when fighting fires in confined spaces.

**Fire fighting media:** CO<sub>2</sub>, dry chemical, foam

**Unusual fire or explosion hazards:** None



<sup>1</sup> See last page for explanations

Blaser Swisslube Inc.  
31 Hatfield Lane, Goshen, New York • Tel. (845) 294-3200 • Fax (845) 294-3102

**Blaser.**  
SWISSLUBE

## MSDS Blasocut

### PRECAUTIONS FOR SAFE HANDLING & USE

<b>Steps to be taken in case material is released or spilled:</b>	As with any other industrial lubricating oil, use oil-binding agents. Spills or leaks may cause slippery conditions. Prevent material from getting into storm sewers or surface waters.
<b>Waste disposal methods:</b>	Spill emulsion with absorbing agents, salts or ultra-filtration. Dispose according to all applicable federal, state and local regulations.
<b>Precautions to be taken in handling/storing:</b>	Avoid direct solar irradiation of concentrate containers.
<b>Other precautions:</b>	Do not store with strong oxidizers.

### CONTROL MEASURES

<b>Respiratory protection:</b>	Not generally required.
<b>Ventilation:</b>	Ventilation sufficient to comply with recommended NIOSH exposure limit for metalworking fluids is suggested.
<b>Protective gloves:</b>	Not generally required.
<b>Eye protection:</b>	Industrial safety glasses are recommended.
<b>Other protective equipment or clothing:</b>	Standard work clothing and shoes.
<b>Work/hygiene practices:</b>	Thorough personal hygiene and clean working practices are sufficient.

### CHEMICAL & PHYSICAL PROPERTIES OF THE COMPLETE PRODUCT

<b>Volatiles in %:</b>	NI
<b>Vapor pressure:</b>	Not volatile
<b>Boiling point:</b>	572°F (300°C)
<b>Free point:</b>	< -22°F (< -30°C)
<b>pH @ 5% (after 24 hrs):</b>	8.9 - 9.2
<b>Specific gravity:</b>	Art. 870: 0.953 g/cm <sup>3</sup> Art. 872: 0.978 g/cm <sup>3</sup>
<b>Viscosity:</b>	Art. 870: 133 mm <sup>2</sup> /sec @ 88°F (20°C) Art. 872: 140 mm <sup>2</sup> /sec @ 88°F (20°C) Art. 870: 39 mm <sup>2</sup> /sec @ 104°F (40°C) Art. 872: 42 mm <sup>2</sup> /sec @ 104°F (40°C)
<b>Solubility in water:</b>	Emulsifies
<b>Appearance and odor:</b>	Light brown liquid / pleasant odor (almonds)

### REACTIVITY DATA

<b>Stability:</b>	Stable
<b>Conditions to avoid:</b>	Avoid direct solar irradiation of containers. Good and safe housekeeping procedures suggest that all combustible materials be stored away from strong oxidizers.
<b>Incompatibility (materials to avoid):</b>	<u>Concentrate:</u> Strong oxidizers <u>End use dilutions:</u> Magnesium
<b>Hazardous decomposition or by-products:</b>	Thermal decomposition (concentrate) above 176°F (80°C); Trace amounts of HCl.
<b>Hazardous polymerization:</b>	Will not occur

### HEALTH HAZARD DATA

<b>LC<sub>50</sub> of concentrate:</b>	>> 8.1 g/m <sup>3</sup> for Art. 870; not determined for Art. 872
<b>LD<sub>50</sub> of concentrate:</b>	> 15 g/kg
<b>Health hazards (acute/chronic):</b>	None
<b>Skin irritation:</b>	Negative
<b>Eye irritation:</b>	Negative
<b>Carcinogenicity:</b>	None

### HEALTH HAZARD DATA, continued

<b>Routes of entry:</b>	• Inhalation:      Unlikely
-------------------------	-----------------------------

Doc. No. 723.900

Edition 2

Page 2 of 3

4/14/2005

Blaser Swisslube Inc.  
31 Hatfield Lane, Goshen, New York • Tel. (845) 284-3200 • Fax (845) 284-3102

**Blaser.**  
SWISSLUBE

### MSDS Blasocut

	• Skin:	No
	• Ingestion:	Accidental only
Ames test:	Negative	
Signs and symptoms of exposure:	None established	
Medical conditions generally aggravated by exposure:	Not established	
OSHA regulated:	No	
WHMIS regulated:	No	
Exposure limits:	NIOSH Recommended exposure limit for Metalworking fluids: 0.5mg/m <sup>3</sup>	
	OSHA 29 CFR 1910.1000 for oil mist in air:	5 mg/m <sup>3</sup>
	ACGIH: TLV for oil mist in air:	5 mg/m <sup>3</sup>

The Mineral oil used in Blasocut passes IP346 for DMSO extractable PNA Betsz(a)pyrene content less than 10 ppm (GC-MS method).

### ENVIRONMENTAL, REGULATORY AND SUPPLEMENTAL INFORMATION

NFPA Storage: III B

#### SARA Title III Information:

• Immediate health (acute):	No
• Reactive hazard:	No
• Fire hazard:	No
• Delayed health (chronic):	No
• Sudden pressure release:	No

Blasocuts do not contain any ingredients listed on the SARA Title III, Section 313 List of Chemicals.

**RCRA / Hazardous Waste:** Blasocuts, as sold, do not meet the criteria of a hazardous waste as defined under 40 CFR 261. In that they do not exhibit the characteristics of a hazardous waste of Subpart C, nor are they listed as a hazardous waste under Subpart D. It is the end user's responsibility to determine the regulatory status of the waste at the time of disposal.

**TSCA:** All ingredients of Blasocuts are listed on the TSCA Chemical Substances Inventory.

**Clean Air Act:** Blasocuts do not contain nor are they manufactured with ozone depleting substances as defined in the Federal Clean Air Act Amendments of 1990, sections 602 and 611.

**Canadian DSL / NDSL Information:** All ingredients of Blasocuts are listed on Canadian DSL.

**DOT:** These products are not considered hazardous under current DOT regulations

**Spills:** These products are classified as oil. Spills into or leading to surface waters that cause a sheen should be reported to the National Response Center at 1-800-424-8802.

	0	1	2	3	4
<b>HMS Ratings</b>					
Health, Fire, Reactivity	Minimal	Slight	Moderate	Serious	Extreme
<b>NFPA 704 Ratings</b>					
<b>(Under Fire Conditions)</b>					
Health Hazard	Normal Material	Slightly Hazardous	Hazardous	Extreme danger	Closely
Fire (Flash Point)	Will not Burn	>200°F	100-200°F	73-100°F	<73°F
Reactivity	Stable	Unstable if heated	Violent Chemical change	Shock and Heat may detonate	May detonate

# MATERIAL SAFETY DATA SHEET

NPCA 1-78

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP

6/13/89

## Section I

MANUFACTURER'S NAME

Randolph Products Co.

STREET ADDRESS

Park Place East

CITY, STATE, AND ZIP CODE

Carlstadt, NJ 07072

EMERGENCY TELEPHONE NO.

INFORMATION TELEPHONE NO. (201) 438-3700

PRODUCT CLASS

Lacquer

MANUFACTURER'S CODE IDENTIFICATION

TRADE NAME

Flat Black Electrostatic Lacquer

E-1995

## Section II - HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	PERCENT	TLV		LEL	VAPOR PRESSURE mmHg @ 20°C
			PPM	mg/m <sup>3</sup>		
Nitrocellulose	9004-70-0	10-15	N/A	10	N/A	N/A
Butyl Acetate	123-86-4	12-15	150	N/A	1.7	15
Toluene	108-88-3	5-10	100	375	1.2	25
Methyl Ethyl Ketone	78-93-3	2-10	200	590	1.8	80
N-Butyl Alcohol	71-36-3	2-4	50	150	1.4	9
Alkyd Resin Solution	N/A	30-35	N/A	10	N/A	N/A
Methyl Alcohol	64-17-5	2-10	1000	1900	4.3	43
Pigments (Total)	N/A	10-20	N/A	10	N/A	N/A
Magnesium Silicate Hydrate	1343-90-4	10-20	N/A	10	N/A	N/A
Hydroxylated Silicon Dioxide	63231-67-4	2-7	N/A	10	N/A	N/A

## Section III - PHYSICAL DATA

BOILING RANGE

170 - 250°F

VAPOR DENSITY

☒ HEAVIER☐ LIGHTER THAN AIR

EVAPORATION RATE

☐ FASTER☒ SLOWER THAN ETHERPERCENT VOLATILE  
BY VOLUMEWEIGHT PER  
GALLON

9.5 - 10.0#

## Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION

Flammable XX  
Combustible

FLASH POINT

16°F (T.C.C.)

LEL 1.2

EXTINGUISHING MEDIA

Sand, Foam, Carbon Dioxide, Chemical Types

UNUSUAL FIRE AND EXPLOSION HAZARDS

Prevent Fire, Keep Away From Heat, Sparks, And Open Flames

SPECIAL FIRE FIGHTING PROCEDURES

Avoid Breathing Vapor or Fumes. Use Air Supplied Rescue Equipment  
For Enclosed Areas.Cool Exposed Containers With Water To Prevent Explosion Due to  
Pressure.

# MATERIAL SAFETY DATA SHEET

187  
NPCA

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP. 7/23/86

## Section I

MANUFACTURER'S NAME

Randolph Products Co.

STREET ADDRESS

Park Place East

CITY, STATE, AND ZIP CODE

Carlstadt, NJ 07072

EMERGENCY TELEPHONE NO.

INFORMATION TELEPHONE NO. (201) 438-3700

PRODUCT CLASS

Thinner

MANUFACTURERS CODE IDENTIFICATION

E-1996

TRADE NAME

Electrostatic Lacquer Reducer

## Section II - HAZARDOUS INGREDIENTS

INGREDIENT	CAS#	PERCENT	TLV		LEL	VAPOR PRESSURE mmHg @ 20°C
			PPM	mg/m <sup>3</sup>		
Toluol	108-88-3	10-20	100		1.2	25
Aliphatic Hydrocarbons	N/A	30-40	200		0.9	25
Acetone	67-6-41	10-20	750		2.6	186
Isopropyl Alcohol	67630	10-20	400		2.0	34
Butyl Acetate	123-86-4	10-20	150		1.4	14
* Carcinogen Or Potential Carcinogen						
☒ Neurotoxin Or Potential Neurotoxin						

## Section III - PHYSICAL DATA

BOILING RANGE 133-280°F

VAPOR DENSITY

☒ HEAVIER

☐ LIGHTER THAN AIR

EVAPORATION RATE

☐ FASTER

☒ SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME

100

WEIGHT PER GALLON

6.7#

## Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION

Flammable - XX

FLASH POINT

4°F (T.C.C.)

LEL

0.9

Combustible

EXTINGUISHING MEDIA

Sand, Foam, Carbon Dioxide, Chemical Types

UNUSUAL FIRE AND EXPLOSION HAZARDS

Prevent Fire, Keep Away From Heat, Sparks, And Open Flames

SPECIAL FIRE FIGHTING PROCEDURES

Avoid Breathing Vapor or Fumes. Use Air Supplied Rescue Equipment For Enclosed Areas.

Cool Exposed Containers With Water To Prevent Explosion Due to Pressure.





holox

## MATERIAL SAFETY DATA SHEET

## PROPANE

Telephone Number: (770) 925-4640

Emergency Contact: CHEMTREC

Emergency Phone Number: (800) 424-9300

## SECTION #1 - IDENTIFICATION

Product: PROPANE

CAS Number: 74-98-6

Product Code: MSDS CODE G-74

Chemical Family: Aliphatic Hydrocarbon

Chemical Formula: C<sub>3</sub>H<sub>8</sub>Synonyms: (LPG) DIMETHYL METHANE  
G-74

LIQUEFIED PETROLEUM GAS

Hazard Rating	• Health:	1 Slight
	• Fire:	4 Extreme
	• Reactivity:	0 Negligible

## SECTION #2 - CHEMICAL COMPONENTS

Component: PROPANE

CAS Number: 74-98-6

ACGIH TLV-TWA: D, Simple Asphyxiant

Maintain oxygen levels above 19.5%

Percent of Mixture: 99.0000 to 99.9800

SHA PEL-TWA: 1000 ppm (Final)

IDLH: 20,000 ppm

## SECTION #3 - PHYSICAL DATA

Boiling Point: - 43.7°F - 42.1°C

Melting Point: - 305.86°F -187.7°C

Vapor Pressure: 124 psia @ 70°F

Density (Air = 1): 1.56

Solubility (H<sub>2</sub>O): Negligible

## APPEARANCE

A colorless gas, shipped as a liquified gas under its own vapor pressure.

## ODOR

Odorless

## SECTION #4 - FIRE FIGHTING &amp; EXPLOSION DATA

Flash Point: - 156°F

Autoignition: 896°F

Lower Explosive Limit (%): 2.2

Upper Explosive Limit (%): 9.5

## FIRE AND EXPLOSION HAZARDS

Propane is heavier than air and may travel a considerable distance to a source of ignition. Should flame be extinguished and flow of gas continue, increase ventilation to prevent flammable mixture formation in low areas or pockets. May burn with invisible flame in bright light. May rapidly form explosive mixtures in air.

Electrical Classification: Class I, Group D.

## EXTINGUISHING MEDIA

## SPECIAL FIRE FIGHTING INSTRUCTIONS

If possible, stop the flow of propane using a remote valve. Never enter a flammable atmosphere. Use water spray to cool surrounding containers.

P. 5/9

Holox, Ltd.

1500 Indian Trail Road

Norcross, Georgia 30093

(770) 925-4640

Page: 1

Rev. Date

10/02/95

## SECTION #5 - EXPOSURE AND EFFECTS - INHALATION

## ROUTES OF EXPOSURE - INHALATION

Propane is primarily a simple asphyxiant. Oxygen levels should be maintained greater than 19.5 percent at normal atmospheric pressure which is equivalent to partial pressure of 135 mm Hg. High concentrations of propane as to exclude an adequate supply of oxygen to the lungs causes dizziness, deeper breathing to air hunger, possible nausea and eventual unconsciousness. Propane is relatively inactive biologically and essentially nontoxic, however high concentrations may have a narcotic like effect. Therefore, the major hazard is the exclusion of an adequate supply of oxygen from the lungs.

## FIRST AID - INHALATION

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS.

Conscious persons should be assisted to uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. Unconscious persons should be moved to an uncontaminated area, given artificial resuscitation supplemental oxygen. Further treatment should be symptomatic and supportive.

## SECTION #5 - EXPOSURE AND EFFECTS - SKIN

## ROUTES OF EXPOSURE - SKIN

Contact with evaporating liquid may cause frostbite and cryogenic "burns".

## FIRST AID - SKIN

For dermal contact or frostbite, flush affected area with lukewarm water. DO NOT USE HOT WATER. A physician should see the patient promptly if the cryogenic "burn" has resulted in blistering of the dermal surface or deep tissue freezing. Seek medical treatment as soon as possible.

## SECTION #5 - EXPOSURE AND EFFECTS - EYES

## ROUTES OF EXPOSURE - EYES

Contact with liquid may cause tissue freezing and cryogenic "burns" causing pain and irritation.

## FIRST AID - EYES

IMMEDIATELY FLUSH with tepid water in large quantities, or with sterile saline solution. Seek medical attention as soon as possible. DO NOT USE HOT WATER!

## SECTION #5 - EXPOSURE AND EFFECTS - INGESTION

## ROUTES OF EXPOSURE - INGESTION

Contact of mucous membranes with liquid may cause tissue freezing and cryogenic burns, although ingestion is unlikely.

## FIRST AID - INGESTION

Treat in a manner similar to skin contact.

## SECTION #5 - MISCELLANEOUS TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP No

IARC: No

OSHA: No

## V. HEALTH/SAFETY INFORMATION

### HEALTH

Steel products in the natural state do not present an inhalation, ingestion, or contact health hazard. However, operations such as welding, burning, sawing, brazing, grinding, and possibly machining, which results in elevating the temperature of the product to or above its melting point or results in the generation of airborne particulates may present hazards. The above operations should be performed in well ventilated areas. The major exposure hazard is inhalation.

Effects of overexposure are as follows:

**Acute:** Excessive inhalation of metallic fumes and dusts may result in irritation of eyes, nose, and throat. Also high concentrations of fumes and dusts of iron-oxide, manganese, copper, zinc, & lead may result in metal fume fever. Typical symptoms consist of a metallic taste in the mouth, dryness and irritation of the throat, chills and fever, and usually last from 12 to 48 hours.

**Chronic:** Chronic and prolonged inhalation of high concentrations of fumes or dust of the following elements may lead to the conditions listed opposite the element:

Iron (Iron-oxide) - Pulmonary effects, siderosis.

Manganese - Bronchitis, pneumonitis, lack of coordination, central nervous system.

Chromium - Various forms of dermatitis, inflammation and/or ulceration of upper respiratory tract, and possibly cancer of nasal passages and lungs. Based on available information, there does not appear to be any evidence that exposure to welding fume induces human cancer.

Nickel - SAME AS CHROMIUM.

Copper - Pulmonary effects, nasal and paranasal sinus, skin and liver.

Vanadium - May affect lungs. May affect blood pressure as vanadium pentoxide.

Cobalt - Inhalation of cobalt dust may cause an asthma-like disease with cough and dyspnea.

Molybdenum - Pain in joints, hands, knees and feet.

Tungsten - Some evidence of pulmonary involvement such as cough.

Lead - Prolonged exposures can cause behavioral changes, kidney damage, periphery neuropathy characterized by decreased hand-grip strength and adverse reproductive effects.

Zinc - None reported.

Medical conditions generally aggravated by exposure would be dermatitis and pulmonary disease or disorders.

Occupational Exposure Limits Chromium and nickel have been identified by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) as potential carcinogens. See Ingredients Section I.

### FIRE AND EXPLOSION

Flash Point	NA	°F	Auto Ignition Temperature	NA	°F	Flammable Limits in Air	Lower	NA	%	Upper	NA	%	Extinguishing Media	NA
Fire and Explosion Hazards			Steel products in their natural state do not present a fire or explosion hazard.						Extinguishing Media Not to be Used					NA

### REACTIVITY

Stability	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Incompatibility (Materials to Avoid)	Stable under normal conditions of use, storage and transport. Reacts with strong acids to form hydrogen gas. At temperatures above melting point, metallic oxide fumes may be liberated.
Conditions to Avoid	<b>Keep Area Well Ventilated</b>		
Non-ventilated areas when cutting, welding, burning, or brazing; avoid generation of airborne dusts and fumes.			
Hazardous Decomposition Products	Metallic oxides.		

## VI. ENVIRONMENTAL

Spill or leak procedures	Special Precautions: Use good housekeeping practices to prevent accumulation of dust and to keep airborne dust to a minimum. Avoid breathing metal fumes or dust.		
Waste Disposal Method	Dust, etc. — follow federal, state, and local regulations regarding disposal.		

## VII. ADDITIONAL INFORMATION

Disclaimer	The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.		
------------	--	--	--

Doc#

# JORGENSEN STEEL & ALUMINUM

## Material Safety Data Sheet

Company Jorgensen Steel & Aluminum 3050 E. Birch Brea, California 92621	Issue Date April 1, 1992	Identification C Alloy & Tool
Trade Name (Common Name or Synonym) Carbon, Alloy, and Tool Steels	Emergency Phone Number (714) 579-8823	or contact your nearest Jorgensen office
Chemical Name Steel	Form Bar, Sheet, Plate, Tubing, Structurals, and Forgings	

### I. INGREDIENTS

Material or Component	CAS Number	% Weight	Exposure Limits	
			OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Base Metal				
Iron (Fe)	7439-89-6	Balance	10 (Fe <sub>2</sub> O <sub>3</sub> Fume)	5.0 (Fe <sub>2</sub> O <sub>3</sub> Fume)
Alloying Elements				
Aluminum (Al)	7429-90-5	0.10 - 1.8	None Listed	5.0 as welding fume
Carbon (C)	7440-44-0	0.01 - 1.5	None Listed	None Listed
Chromium (Cr)	7440-47-3	0.01 - 12	1.0 as chrome	0.5 as chrome
Cobalt (Co)	7440-48-4	8 Max.	0.1 as cobalt and fume	0.05 as fume
Copper (Cu)	7440-50-8	0.04 - 0.7	0.2 as copper; 1.0 as dust	0.2 as fume; 1.0 as dust
Lead (Pb)	7439-92-1	0.15 - 0.35	0.05 as fume & dust	0.15 as dust and fume
Manganese (Mn)	7439-96-5	0.05 - 2.0	5 as manganese	5 as dust; 1 as fume
Molybdenum (Mo)	7439-98-7	0.01 - 1.10	15 as insoluble compds	10 as insoluble compds
Nickel (Ni)	7440-02-0	0.01 - 10	1.0 as Nickel	1.0 as Nickel
Phosphorous (P)	7723-14-0	0.15 Max	0.1 as Phosphorous	0.1 as Phosphorous
Silicon (Si)	7440-21-3	0.15 - 2.20	None Listed	10 total dust
Sulfur (S)	7704-34-9	0.001 - 0.35	13 sulfur dioxide	5 sulfur dioxide
Tungsten (W)	7440-33-7	0 - 18	None Listed	5 insoluble compds
Vanadium (V)	7440-62-2	0.01 - 1.0	0.5 dust; 0.1 fume	0.05 dust and fume
Zinc (Zn) coating	1314-13-2	10 Max	5.0 as fume	5.0 as fume

Note: The above listing is a summary of elements used in alloying steel. Various grades of steel will contain different combinations of these elements. Trace elements may also be present in minute amounts.

### II. PHYSICAL DATA

Material is (At Normal Conditions): <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other		Appearance and Odor Gray-Black With Metallic Lustre -- Odorless	
Acidity/Alkalinity ph = NA	Approx Melting Point 2750°F Boiling Point NA °F	Specific Gravity (H <sub>2</sub> O = 1) — 7 Solubility in water (% by weight) — NA	Vapor Pressure (mm Hg at 20°C) NA

### III. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection NIOSH approved dust/mist/fume respirator should be used during welding or burning if OSHA PEL or TLV is exceeded.	Hands, Arms, and Body Use appropriate protective clothing such as welders aprons & gloves when welding or burning. Check local codes.
Eyes and Face Safety glasses should always be worn when grinding or cutting; face shields should be worn when welding or burning.	Other Clothing and Equipment As required for protection depending on the operation and safety codes.

### IV. EMERGENCY MEDICAL PROCEDURES

Inhalation:	Remove to fresh air; if condition continues, consult physician.
Eye Contact:	Immediately flush well with running water to remove particulate; get medical attention.
Skin Contact:	If irritation develops, remove clothing and wash well with soap and water. If condition persists, seek medical attention.
Ingestion:	If significant amounts of metal are ingested, seek medical attention.

**V. HEALTH/SAFETY INFORMATION****HEALTH**

Steel products in the natural state do not present an inhalation, ingestion, or contact health hazard. However, operations such as welding, burning, sawing, brazing, grinding, and possibly machining, which results in elevating the temperature of the product to or above its melting point or results in the generation of airborne particulates may present hazards. The above operations should be performed in well ventilated areas. The major exposure hazard is inhalation.

Effects of overexposure are as follows:

**Acute:** Excessive inhalation of metallic fumes and dusts may result in irritation of eyes, nose, and throat. Also high concentrations of fumes and dusts of iron-oxide, manganese, copper, zinc, & lead may result in metal fume fever. Typical symptoms consist of a metallic taste in the mouth, dryness and irritation of the throat, chills and fever, and usually last from 12 to 48 hours.

**Chronic:** Chronic and prolonged inhalation of high concentrations of fumes or dust of the following elements may lead to the conditions listed opposite the element:

Iron (Iron-oxide) - Pulmonary effects, siderosis.

Manganese - Bronchitis, pneumonitis, lack of coordination, central nervous system.

Chromium - Various forms of dermatitis, inflammation and/or ulceration of upper respiratory tract, and possibly cancer of nasal passages and lungs. Based on available information, there does not appear to be any evidence that exposure to welding fume induces human cancer.

Nickel - SAME AS CHROMIUM.

Copper - Pulmonary effects, nasal and paranasal sinus, skin and liver.

Vanadium - May affect lungs. May affect blood pressure as vanadium pentoxide.

Cobalt - Inhalation of cobalt dust may cause an asthma-like disease with cough and dyspnea.

Molybdenum - Pain in joints, hands, knees and feet.

Tungsten - Some evidence of pulmonary involvement such as cough.

Lead - Prolonged exposures can cause behavioral changes, kidney damage, periphery neuropathy characterized by decreased hand-grip strength and adverse reproductive effects.

Zinc - None reported.

Medical conditions generally aggravated by exposure would be dermatitis and pulmonary disease or disorders.

**Occupational Exposure Limits**

Chromium and nickel have been identified by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) as potential carcinogens. See Ingredients Section I.

**FIRE AND EXPLOSION**

Flash Point	NA	°F	Auto Ignition Temperature	NA	°F	Flammable Limits in Air		Extinguishing Media
						Lower	Upper	
						NA	NA	%
						NA	NA	%
Fire and Explosion Hazards								
Steel products in their natural state do not present a fire or explosion hazard.								
Extinguishing Media Not to be Used								
NA								

**REACTIVITY**

Stability		Incompatibility (Materials to Avoid)	
<input checked="" type="checkbox"/> Stable	<input type="checkbox"/> Unstable	Stable under normal conditions of use, storage and transport. Reacts with strong acids to form hydrogen gas. At temperatures above melting point, metallic oxide fumes may be liberated.	
Conditions to Avoid		Keep Area Well Ventilated	
Non-ventilated areas when cutting, welding, burning, or brazing; avoid generation of airborne dusts and fumes.			
Hazardous Decomposition Products			
Metallic oxides.			

**VI. ENVIRONMENTAL**

Spill or leak procedures	Special Precautions: Use good housekeeping practices to prevent accumulation of dust and to keep airborne dust to a minimum. Avoid breathing metal fumes or dust.
NA	
Waste Disposal Method	
Dust, etc. — follow federal, state, and local regulations regarding disposal.	

**VII. ADDITIONAL INFORMATION****Disclaimer**

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Back

Proven technology, pure performance.

# SYNTILO® 9930

$$= 10.52 \text{ gal}$$

## SYNTHETIC CUTTING & GRINDING FLUID

**SYNTILO® 9930** is a heavy duty cutting and grinding fluid for ferrous alloys. This oil-rejecting fluid outperforms conventional coolants in difficult operations. **SYNTILO® 9930** provides unbeatable bimetallic corrosion protection to keep parts and machines free from in-process rust. In hard or soft water, **SYNTILO® 9930** forms a stable solution that will not foam. **SYNTILO® 9930** is a clean fluid that runs with trouble-free dependability.

## Performance Benefits

- Settles chips and swarf quickly to maintain a clean work area.
- Rejects tramp oils to the surface for easy skimming.
- Inhibits microbial growth to extend fluid life in central systems and individual sumps.
- Stable fluid suitable for a wide range of water conditions.
- Low foaming in all water conditions.
- Protects machine tools and parts from bimetallic corrosion.
- Formaldehyde-free to comply with health and safety regulations.

## Typical Operations

Boring  
Centerless grinding  
Cylindrical grinding  
Internal grinding  
Reaming  
Surface grinding  
Tapping

## Metal Safety

**SYNTILO® 9930** is recommended for machining and grinding of ferrous metals and stainless steels. Consult your Castrol Sales Engineer for questions regarding compatibility.

## Machine Tool Approvals

**SYNTILO® 9930** is approved by the following manufacturers:  
 Deckel Maho, Gildemeister  
 Metalmizer for use in bandsaws

### Recommended Dilutions

Grinding: 3 - 5%  
Machining: 4 - 8%



HRS Reference #109

**Castrol Industrial North America Inc**  
Networking Division

1001 West 31st Street • Downs Grove IL 60515 • (800) 421-2681



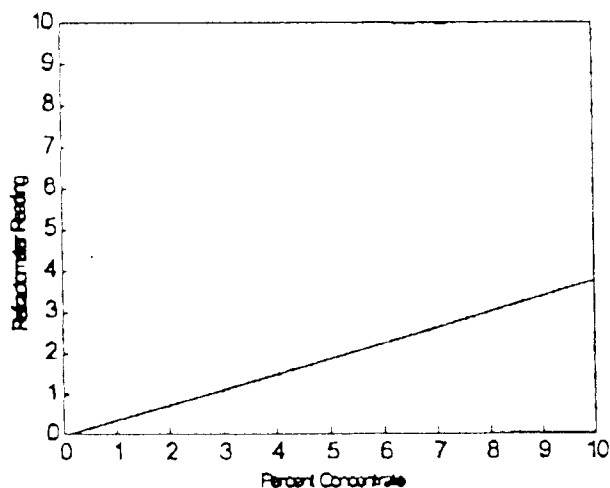
**Typical  
Characteristics**

Appearance of concentrate: Transparent blue fluid  
Appearance of dilution: Transparent blue fluid  
pH of concentrate: 8.9 - 9.9  
pH of dilution @ 5%: 8.5 - 9.3  
Specific gravity @ 60° F (16° C): 1.07 - 1.09  
Bulk density (lbs/gal): 8.9  
Chlorine: No  
Nitrites: No  
Phenols: No  
DSL approved (Canada only): Yes

**Concentration  
Control**

This chart was prepared with dilutions in distilled water using an Atego Model N1 refractometer. The graph is a linear regression of actual readings from laboratory tests. Therefore, the line may not always begin at point 0,0 the absolute reading of distilled water. It is important to realize that refractometer readings are dependent upon the type of refractometer and water used. Atego Model N1 refractometers are available through Castrol Industrial North America Inc.

% Concentrate	Refractometer Reading
3.0	1.1
6.0	1.8
7.0	2.6
10.0	3.7



All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol Industrial North America Inc. products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.

3/26/98

8YNTILO® 8930

This document is for reference purposes only.

MATERIAL SAFETY DATA SHEET

SYNTILO 9930  
MWD

Page 1 of 6  
Revised 1/19/00  
Replaces 12/30/99  
Printed 1/20/00

A. Chemical Product and Company Identification

Product Name: SYNTILO 9930  
General Use: See Product Data Sheet  
Product Description: See Product Data Sheet  
MSDS Code: 02006A  
Synonyms/Trade Names: Same as product name  
SYNTILO IS REGISTERED IN THE U.S. PATENT AND TRADEMARK OFFICE.

Manufacturer: Castrol Industrial North America Inc.  
Address (Line 1): 1001 West 31st Street  
Address (Line 2): Downers Grove, IL 60515-1280  
Emergency Phone: 1-800-424-9300 (CHEMTREC)

Information Phone: 1-800-621-2661  
Regulatory Questions/MSDS Preparation - SHEA Department  
Product Chemistry/Application Questions - Technical Support

If available in Canada, this product is supplied by:  
Castrol Canada Inc.  
3660 Lakeshore Blvd. West  
Toronto, Ontario M8W 1P2

Information Phone: 416-252-5511

B. Composition/Information on Ingredients

Ingredient Name	CAS Number	%
ETHANOL, 2,2',2''-NITRILOTRIS-	102-71-6	20 - 25%
BORON SODIUM OXIDE (B4NA2O7)	1330-43-4	1 - 5%

Contains no other ingredients now known to be hazardous as defined by OSHA

CAS Number      Exposure Guideline

-----  
If applicable, the exposure limits listed are found in the ACGIH TLV guide  
for TWA unless otherwise noted.

102-71-6	5 mg/m3 TWA
1330-43-4	1 mg/m3 TWA

313 Listed Chemicals

If none listed here, or in Section O, there are no 313 chemicals present above  
threshold value.

# MATERIAL SAFETY DATA SHEET

SYNTILO 9930  
MWD

Page 2 of 6  
Revised 1/19/00  
Replaces 12/30/99  
Printed 1/20/00

## B. Composition/Information on Ingredients (Cont.)

## C. Hazards Identification

### \*\*\*\*\* EMERGENCY OVERVIEW \*\*\*\*\*

Appearance:  
Transparent blue fluid, slight amine odor

CONCENTRATE WILL CAUSE EYE IRRITATION. MISTS OF THE CONCENTRATE AND DILUTION MAY CAUSE RESPIRATORY IRRITATION. RECOMMENDED USE DILUTIONS ARE NOT EXPECTED TO CAUSE EYE IRRITATION. AVOID CONTACT WITH EYES. WASH THOROUGHLY AFTER HANDLING. AVOID BREATHING MISTS.

NFPA: Health 1 Flammability 1 Reactivity 0 Special

#### Potential Health Effects

Eye: Concentrate may cause eye irritation. Recommended use dilutions (10% or less) are not expected to cause eye irritation.

Skin Contact: Concentrate is not expected to cause skin irritation.

Skin Absorption: Concentrate is not expected to be toxic...based on testing of similar product chemistry where the LD50 (rabbit) was greater than 2g/kg.

Ingestion: Concentrate is not expected to be toxic. LD50 (rat) is greater than 5.0 g/kg for a similar product.

Inhalation: TLV for product not established. Refer to hazardous ingredients list for any ingredient TLV's. Mists of the concentrate and dilutions may cause respiratory irritation.

Chronic Effects: A review of the literature does not show obvious long term hazard.

Carcinogenicity: No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA unless otherwise noted in Section P - Other Information.

Routes of Exposure: Skin contact, Eye contact, Inhalation

## D. First Aid Measures

Eye: CONCENTRATE - Immediately flush eyes with plenty of water. Get medical attention if irritation persists. RECOMMENDED USE DILUTIONS - In case of contact, flush eyes with plenty of water. Get medical attention if irritation occurs.

Skin: Wash skin with soap and water. If irritation occurs, get medical attention. Wash clothing before reuse.

Ingestion: Get medical attention immediately.

Inhalation: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.



MATERIAL SAFETY DATA SHEET

Page 3 of 6  
Revised 1/19/00  
Replaces 12/30/99  
Printed 1/20/00

SYNTILO 9930  
MWD

B. Fire Fighting Measures

Flammable Properties

Flash Point (degrees F/C): None / None Method: NA

Upper Flammable Limit: NA

Lower Flammable Limit: NA

Autoignition Temperature: Not determined

Hazardous Products of Combustion: Potential combustion products are carbon, nitrogen, and boron.

Properties That Could Increase Fire or Explosion Hazard: None known.

Extinguishing Media: Water, dry chemical, CO2, or alcohol foam.

Fire Fighting Instructions: Wear self contained breathing apparatus when fire fighting in a confined space. Cool fire exposed containers with waterspray to prevent rupture.

F. Accidental Release Measures

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Flush residual spill with water. For large spills, dike for later disposal.

G. Handling and Storage

Avoid breathing mists. Avoid contact with eyes. Wash thoroughly after handling. Do not ingest. Keep drums closed when not in use. Bring product to room temperature before use.

H. Exposure Controls/Personal Protection

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety glasses with side shield or chemical goggles.

Skin Protection: Wear impervious gloves such as rubber if desired.

Respiratory Protection: Good industrial hygiene practices recommend that engineering controls be used to reduce environmental concentrations to the threshold limit value (TLV) or permissible exposure limit (PEL), if applicable. If any associated TLV or PEL is exceeded, provide NIOSH approved respiratory protection.

Other: Impervious protective clothing and chemical resistant safety shoes should be worn to minimize contact. Wash contaminated clothing with soap and water and dry before reuse. Emergency shower and eyewash facility should be provided in all areas in which this product is handled.

Exposure Guidelines: See information provided in Section B, Ingredients.

MATERIAL SAFETY DATA SHEET

SYNTILO 9930  
MWD

Page 4 of 6  
Revised 1/19/00  
Replaces 12/30/99  
Printed 1/20/00

I. Physical and Chemical Properties

Appearance/Odor:  
Transparent blue fluid, slight amine odor  
pH (conc): NA pH at 5% : 8.9 - 9.4  
Vapor Pressure (mm Hg): ND  
Vapor Density (Air = 1): ND  
Boiling Point (degrees F/C): NA / NA  
Freezing Point (degrees F/C): not determined  
Melting Point (degrees F/C): 0.00 / 0.00 CELSIUS  
Solubility in Water: Complete  
Specific Gravity at 60 degrees F (H2O = 1): 1.0675 +/- 0.0175  
Density: Not calculated  
Softening Point (degrees F): Not determined  
Evaporation Rate (n-Butyl Acetate = 1): < 1  
Viscosity: Not available  
Bulk Density: Not determined  
% Volatile: ~60%  
VOC: 0.5900 lbs/gallon Method: ESTIMATED  
Octanol/Water Partition Coefficient: Not determined  
Saturated Vapor Concentration: Not determined  
Molecular Weight: Not applicable

J. Stability and Reactivity

Chemical Stability: Stable under normal conditions.  
Conditions To Avoid: None known.  
Incompatibility With Other Materials: Strong oxidizing agents.  
Hazardous Decomposition Products: Potential combustion products are carbon, nitrogen, and boron.

K. Toxicological Information

Eye Effects: Concentrate may cause eye irritation. Recommended use dilutions (10% or less) are not expected to cause eye irritation.  
Skin Effects, Contact: Concentrate is not expected to cause skin irritation.  
Skin Effects, Absorption: Concentrate is not expected to be toxic....based on testing of similar product chemistry where the LD50 (rabbit) was greater than 2g/kg.  
Acute Oral Effects (Ingestion): Concentrate is not expected to be toxic. LD50 (rat) is greater than 5.0 g/kg for a similar product.  
Acute Inhalation Effects: TLV for product not established. Refer to hazardous ingredients list for any ingredient TLV's. Mists of the concentrate and dilutions may cause respiratory irritation.  
Chronic Effects: A review of the literature does not show obvious long term hazard.  
Carcinogenicity: No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA unless otherwise noted in Section P - Other Information.

---

MATERIAL SAFETY DATA SHEET

---

Page 5 of 6  
Revised 1/19/00  
Replaces 12/30/99  
Printed 1/20/00

SYNTILO 9930  
MWD

---

L. Ecological Information

---

Ecotoxicological Information: No specific ecological data are available for this product.

---

M. Disposal Considerations

---

US EPA Hazardous Waste Numbers:

This product as purchased does not fall under current U.S. EPA RCRA definitions of hazardous waste. Under RCRA it is the generator's responsibility to determine the status of the waste at the time of its disposal.

General Disposal Considerations:

Dispose of in accordance with local, state and federal regulations.

Disposal of this material to the land may be banned by federal law (40 CFR 268).

CERCLA Reportable Quantity: This product does not contain any CERCLA regulated materials.

---

N. Transport Information

---

Hazardous Materials Description/Proper Shipping Name:

NOT REGULATED

Hazard Class: Same As Above

Identification Number (UN or NA Number): Same As Above

Packing Group: Same As Above

Freight Class:

NMFC 50455, COMPOUNDS OR LUBRICANTS, METAL CUTTING, DRAWING OR DRILLING NO

Telephone Number for Transport Instructions: 1-800-621-2661, SHEA Department

---

O. Regulatory Information

---

U.S. Federal Regulations:

Hazardous per OSHA 29 CFR 1910.1200: Yes

CERCLA/EPCRA:

Section 302 Extremely Hazardous Substances (EHS):

No listed ingredients are present on the 302 list.

Section 311/312 Hazard Class(es): Immediate: YES Delayed: NO

Fire: NO Reactivity: NO Sudden Release of Pressure: NO

Section 313 Toxic Chemicals:

If none listed here or in Section B, there are no 313 chemicals present above threshold value.

Page	6 of	6
Revised	1/19/00	
Replaces	12/30/99	
Printed	1/20/00	

O. Regulatory Information (Cont.)

P. Other Information

No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

Information presented herein has been compiled from information provided to us by our suppliers and other sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or the use of any product in violation of any patent or in violation of any law or regulation. It is the users' responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.

## \*\*\* MATERIAL SAFETY DATA SHEET \*\*\*

date of prep : 02/13/89

12224 (page 1)

## SECTION I

manufacturer : C.E. BRADLEY LABORATORIES, INC.

address : P.O. BOX 811

BRATTLEBORD, VT 05301

PREP. BY: RICHARD S. CARLSON CHIEF CHEMIST

telephone# : (802) 257-7971

emergency# : (802) 257-7971

## - H M I S -

HEALTH	: 1	:
FLAMMABILITY	: 3	:
REACTIVITY	: 1	:
PERSONAL PROTECT.	: H	:

product class: F00

(HAZARD RATING : 0=least, 1=slight, 2=moderate, 3=high, 4=extreme, \*=chronic)

mfg. code id : 12224

(H = splash goggles, gloves, synthetic apron, &amp; vapor respirator)

trade name : LACQUER THINNER {12224 / 8F101T}

## SECTION II-A

## HAZARDOUS COMPONENTS

no.	component	CAS#	% by wt.	SARA 313	vapor pressure (mm Hg @ 20 C)	LEL (@ 25 C)
1	TOLUENE	108-88-3	30 - 35	YES	24.00	1.00
2	ISOPROPYL ALCOHOL	67-63-0	5 - 10	NO	30.00	N/A
3	N-BUTYL ALCOHOL	71-36-3	5 - 10	YES	4.00	1.40
4	ISOBUTYL ACETATE	110-19-0	15 - 20	NO	12.50	N/A
5	ETHYL ACETATE	141-78-6	15 - 20	NO	82.00	2.18
6	ALIPHATIC PETROLEUM DISTILLATES	64742-89-8	25 - 30	NO	N/A	N/A

None of the components of this product are recognized as carcinogenic.

(N/A = not applicable)

## SECTION II-B

## OCCUPATIONAL EXPOSURE LIMITS

no.	PEL/TWA	OSHA PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	PEL/TWA	MFG PEL/CEILING
1	200 ppm	300ppm, 500ppm	10m/8hr 100 ppm	150 ppm	N/E	N/E
2	400 ppm	N/E	400 ppm	500 ppm	N/E	N/E
3	100 ppm	N/E	50 ppm CEILING (SKIN)	N/E	N/E	N/E
4	150 ppm	N/E	150 ppm	187 ppm	N/E	N/E
5	400 ppm	N/E	400 ppm	N/E	N/E	N/E
6	500 ppm	N/E	300 ppm	N/E	N/E	N/E

(SKIN) absorption may contribute to the overall exposure to this material. Take appropriate measures to prevent skin contact.

(N/E = not established)

## SECTION III

## PHYSICAL DATA

boiling point	: not established	% volatile by volume	: 100.00 +/- 2%
evaporation rate	: <1 (ether = 1)	% volatile by weight	: 100.00 +/- 2%
vapor density	: >1 (air = 1)	weight per gallon	: 6.86 +/- .2

## SECTION IV

## HEALTH INFORMATION

## HEALTH CONTACT

BASED ON THE PRESENCE OF COMPONENTS 2 AND 3 PRODUCT IS PRESUMED TO BE SEVERELY IRRITATING TO THE EYES. EXPOSURE MAY CAUSE EXTENSIVE CORNEAL INJURY. BASED ON THE PRESENCE OF COMPONENTS 1, 2, 3, 4 AND 5 PRODUCT VAPORS MAY ALSO BE IRRITATING TO THE EYES.

\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*

date of prep : 02/15/89

SECTION I

Manufacturer : C.E. BRADLEY LABORATORIES, INC.  
 address : P.O. BOX 811  
 BRATTLEBORO, VT 05301  
 PREP. BY: RICHARD S. CARLSON CHIEF CHEMIST  
 telephone# : (802) 257-7971  
 emergency# : (802) 257-7971

- H M I S -

HEALTH : 1  
 FLAMMABILITY : 3  
 REACTIVITY : 1  
 PERSONAL PROTECT.: H

product class: F00  
 mfg. code id : 35356  
 trade name : FLAT BLACK SEALER (35356)

(HAZARD RATING : 0=least, 1=slight, 2=moderate, 3=high, 4=extreme, \*=chronic)  
 (H = splash goggles, gloves, synthetic apron, & vapor respirator)

SECTION II-A

HAZARDOUS COMPONENTS

no.	component	CAS#	% by wt.	SARA 313	vapor pressure (mm Hg @ 20 C)	LEL (@ 25 C)
1	NITROCELLULOSE	9004-70-0	5 - 10	NO	N/A	N/A
2	ISOPROPYL ALCOHOL	67-63-0	1 - 5	NO	30.00	N/A
3	VM&P NAPHTHA	8032-32-4	1 - 5	NO	5.20	1.20
4	TOLUENE	108-88-3	35 - 40	YES	24.00	1.00
5	N-BUTYL ALCOHOL	71-36-3	1 - 5	YES	4.00	1.40
6	ETHANOL	64-17-5	1 - 5	NO	N/A	N/A
7	n-BUTYL ACETATE	123-86-4	10 - 15	NO	10.00	1.38 (@ 38 C)
8	ETHYL ACETATE	141-78-6	10 - 15	NO	82.00	2.18
9	METHYL ETHYL KETONE	78-93-3	1 - 5	YES	70.20	1.80
10	XYLENE	1330-20-7	5 - 10	YES	6.60	1.00
11	ALIPHATIC PETROLEUM DISTILLATES	64742-89-8	1 - 5	NO	N/A	N/A

None of the components of this product are recognized as carcinogenic.

(N/A = not applicable)

SECTION II-B

OCCUPATIONAL EXPOSURE LIMITS

no.	OSHA PEL/TWA	OSHA PEL/CEILING	ACGIH TLV/TWA	ACGIH TLV/STEL	MFG PEL/TWA	MFG PEL/CEILING
1	N/E	N/E	N/E	N/E	N/E	N/E
2	400 ppm	N/E	400 ppm	500 ppm	N/E	N/E
3	400	N/E	300 ppm	N/E	N/E	N/E
4	200 ppm	300ppm, 500ppm 10m/8hr	100 ppm	150 ppm	N/E	N/E
5	100 ppm	N/E	50 ppm CEILING (SKIN)	N/E	N/E	N/E
6	1000 ppm	N/E	1000 ppm	N/E	N/E	N/E
7	150 ppm	N/E	150 ppm	200 ppm	N/E	N/E
8	400 ppm	N/E	400 ppm	N/E	N/E	N/E
9	200 ppm	N/E	200 ppm	300 ppm	N/E	N/E
10	100 ppm	N/E	100 ppm	N/E	N/E	N/E
11	500 ppm	N/E	300 ppm	N/E	N/E	N/E

dried film of this product may become a dust nuisance when removed by sanding, blasting or grinding.

(SKIN) absorption may contribute to the overall exposure to this material. Take appropriate measures to prevent skin contact.

(N/E = not established)

COMMUNITY RIGHT-TO-KNOW REPORTING FORM

Issued 6/26/87  
Revised 6/30/88

1. Company Name <b>UST, Inc.</b>		2. Date <b>6/30/88</b>	3. Trade Secret Claimed: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		FOR OFFICIAL USE ONLY
4. Mailing Address <b>P.O. Box 1200 Bowen Road</b>		5. City, State, Zip Code <b>Bennington, VT 05201</b>			
6. Actual Site Address (if different from above) <b>Same</b>		7. Phone Number <b>447-7561</b>			
8. Municipal (Local) Fire Department <b>Bennington Rural Fire Dept.</b>		9. Emergency Contact <b>Raymond Prouty</b> Title <b>Plant Manager</b> Work Phone <b>447-7561</b> Home Phone <b>442-2273</b>			
10. Signature of Employer or Employer's Representative <i>Raymond B. Prouty Jr.</i>		Date <b>6-30-88</b>			

11. HAZARDOUS CHEMICALS

Registry Number:  
I.D. Number:

(A) Chemical Manufacturer (Include Address)	(B) Trade Name	(C) Chemical Name(s)	(D) CAS #	(E) Location	(F) Ave. Quantity on Hand (10-100-1000-10000) Check appropriate box	(G) U T	(H) G A	(I) L B	(J) Trade Secret Claim
Oakite Products Berkeley H'ght, NJ	Controlant 150 SO	Naphthenic Distillate	64742-52-5	Factory Floor	X		X		No
Oakite Products Berkeley H'ght, NJ	Formula C	Triethanolamine	102-71-6	Factory Floor	X		X		No
Oakite Products Berkeley H'ght, NJ	Grow- No- More	Hydroxyethyl	4719-04-4	Factory Floor	X		X		No
Oakite Products Berkeley H'ght, NJ	STC	Potassium Hydroxide	1310-58-3	Factory Floor	X		X		No
Texaco Inc. Beacon, NY	Regal Oil R&O 100	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Texaco Inc. Beacon, NY	Rando Oil HD 68	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Texaco Inc. Beacon, NY	Rando Oil HD 32	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Texaco Inc. Beacon, NY	Meropa 68	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Texaco Inc. Beacon, NY	Way Lub 68	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Mobil Oil Scarsdale, NY	Cutting Oil Omicron	Petroleum Oil	UN 1270	Factory Floor	X		X		No
Ashland Chemical Columbus, OH	Mineral Spirits	Petroleum Distillate	UN 1268	Factory Floor	X		X		No

HRS Release	(A)	(B)	(C)	(D)	(E)	(F)				C	G	(G)
	Chemical Manufacturer (Include Address)	Trade Name	Chemical Name(s)	CAS #	Location	Avg. Quantity on Hand				U	A	L
						<10	10-100	100-1000	>1000	P	L	B
						Check appropriate box				T	S	S
	Texco Corp. Cincinnati, OH	Globrite 40	Sodium Hydroxide	1310-73-2	Factory Floor	X					X	No
	Chemical Finish'g Springfield, MA	System Black	Caustic Soda	1310-73-2	Factory Floor	X					X	Yes
	Oakite Products Berkeley H'ght, NJ	HPO	Petroleum Naphtha	UN 1255	Factory Floor		X			X		No
	Randolph Products Carlstadt, NJ	Electrostatic Lacquer	Toluene	108-88-3	Factory Floor		X			X		No
	Randolph Products Carlstadt, NJ	Lacquer Reducer	Toluol	108-88-3	Factory Floor		X			X		No
	Chemical Finish'g Springfield, MA	720SL	Phosphates	NA 9147	Factory Floor	X					X	Yes
	Ashland Chemical Columbus, OH	Trichlorethan 111	Same	71-55-6	Factory Floor	X				X		No
	Ashland Chemical Columbus, OH	Sodium Nitrite	Same	7632-00-0	Factory Floor	X					X	No
	Koal Industries Elk Grove, IL	Micralube No. 1264	Petroleum Oil	UN 1270	Factory Floor	X				X		No
	Sunnen Products St. Louis, MO	Honing Oil MB30-3168	Petroleum Oil	UN 1270	Factory Floor	X				X		No
	B.C.S. Company Thompson, CT	Vibratory Cleaner L-33C	Sodium Hydroxide	1310-73-2	Factory Floor	X				X		Yes
	Union Carbide New York, NY	Oxygen	Same	UN 1072	Factory Floor		X				X	No
	Union Carbide New York, NY	CO2 & Argon	Same	UN 1006	Factory Floor		X				X	No
	Welding Products Murray Hill, NJ	Mappolene	Liquefied Petroleum Gas	115-07-1	Factory Floor	X					X	No
	Chevron, Inc. Richmond, CA	Gulf Super+ Quench 70	Petroleum Oil	UN 1270	Factory Floor	X				X		No
	Sonneborn Products Minneapolis, MN	Lapidolith	Sulfuric Acid	7664-93-9	Factory Floor	X				X		No
	Oakite Products Berkeley H'ght, NJ	8094 PD	Triethanola- mine	102-71-6	Factory Floor	X				X		No
	Airco Industrial Murray Hill, NJ	Oxygen	Same	UN 1072	Tank Outside of Factory					X		X
	Airco Industrial Murray Hill, NJ	Nitrogen	Same	UN 1066	Tank Outside of Factory					X		X



Page 338 of 434



NSK STEERING SYSTEMS AMERICA, Inc.

110 Shields Drive  
Bennington, Vermont 05201

Telephone: (802) 442-5448  
Fax: (802) 442-2535

To: Trish Coppleino	Phone: 802-241-3967
Company: Vermont ANR	Fax: 802-241-3296
From: Mick Goldsmith	Phone: 802-442-5448 ext 258.
Date: 11/17/05	Page 1 of 4

Subject: Blasser Coolant.

Reference: White liquid leaking from scrap containers.

Trish,

As discussed earlier this morning please find attached the MSDS for the Blasser coolant used here for our machining process. The Blasser is diluted to between 3% and 7% with water when it is used here.

If you have any questions don't hesitate to call.

All the best,

Mick Goldsmith.  
Facilities Manager.

## Manifest Info For Waste Shipped: 01/01/1999 - 15/06/2002

VTD082275959

U S TSUBAKI

119 BOWEN RD, BENNINGTON

MAJ186619	Shipped: 1/22/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 1/25/1999
A	VIBRATORY SLUDGE	2000 P	MA99,
IL7785170	Shipped: 1/27/1999	To: CLEAN HARBORS SERVICES INC	Received: 2/10/1999
A	OIL FILTERS	600 P	VT02,
MDC0795986	Shipped: 1/27/1999	To: CHEM-CLEAR OF BALTIMORE, INC.	Received: 2/2/1999
A	OILY DEBRIS	1000 P	VT02,
IL7829597	Shipped: 3/31/1999	To: CLEAN HARBORS SERVICES INC	Received: 4/7/1999
A	WASTE PAINT	55 G	F005,
B	OIL FILTERS	200 P	VT02,
MDC0795356	Shipped: 3/31/1999	To: CHEM-CLEAR OF BALTIMORE, INC.	Received: 4/2/1999
A	NON HAZ OIL WASTE	1300 P	VT02,
MAK080176	Shipped: 4/9/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 4/12/1999
A	OIL/COOLANT/WATER	550 G	MA01,
MAK078024	Shipped: 5/11/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 5/12/1999
A	VIBRATORY SLUDGE	2000 P	MA99,
MAK084124	Shipped: 6/17/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 6/21/1999
A	OIL/COOLANT/WATER	385 G	MA01,
IL7829379	Shipped: 6/30/1999	To: CLEAN HARBORS SERVICES INC	Received: 7/6/1999
A	PAINT	300 P	F005,
B	SODIUM HYDROXIDE	250 P	D002,
C	NON REG OIL FILTERS	250 P	VT02,
MDC0809725	Shipped: 6/30/1999	To: CHEM-CLEAR OF BALTIMORE, INC.	Received: 7/7/1999
A	OIL WASTE	2400 P	VT02,
MDC0859733	Shipped: 8/30/1999	To: CHEM-CLEAR OF BALTIMORE, INC.	Received: 9/3/1999
A	OILY MATERIAL	1050 P	VT02,
MAK084961	Shipped: 9/16/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 9/21/1999
A	OIL/COOLANT/WATER	2800 P	MA01,
VT0112186	Shipped: 9/29/1999	To: SPRING GROVE RESOURCE RECOVER	Received: 10/20/1999
A	PAINT	425 P	F005,
B	OIL WASTE	750 P	VT02,
MAK085015	Shipped: 10/22/1999	To: JONES ENVIRONMENTAL SERVICES	Received: 10/28/1999
A	VIBRATORY SLUDGE	1 Y	MA99,
MAM113797	Shipped: 1/18/2000	To: JONES ENVIRONMENTAL SERVICES	Received: 1/18/2000
A	OIL/COOLANT/WATER	330 G	MA01,
MAJ654266	Shipped: 1/26/2000	To: CLEAN HARBORS OF BRAINTREE IN	Received: 1/28/2000
A	PAINT RELATED MATERIAL	55 G	D001
MAJ113559	Shipped: 3/20/2000	To: JONES ENVIRONMENTAL SERVICES	Received: 3/23/2000

W/ NO LDR TO BRAINTREE MA WHEN LDRS ALWAYS TO CHICAGO IL.

A	OIL/COOLANT/WATER	385 G	MA01	
MDC0867792	Shipped: 3/29/2000	To: SAFETY-KLEEN (TS) INC	Received:	4/2/2000
A	OIL FILTERS	250 P	VT02	
B	REGULATED MATERIAL	900 P	VT02	
MAM113494	Shipped: 4/13/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	4/18/2000
A	VIBRATORY SLUDGE	2000 P	MA99	
IL7288295	Shipped: 6/28/2000	To: CLEAN HARBORS SERVICES INC	Received:	7/19/2000
A	WASTE PAINT	55 G	F005	
B	SODIUM HYDROXIDE	110 G	D002	
C	SODIUM HYDROXIDE	600 P	D002	
D	NON REG	750 P	VT02	
VT126206	Shipped: 7/21/2000	To: ENVIRONMENTAL PRODUCTS & SER	Received:	8/1/2000
A	SOLIDS W/OIL	50 P	VT02	
MAM123102	Shipped: 7/26/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	7/27/2000
A	VIBRATORY SLUDGE	3000 P	MA99	
VT1269	Shipped: 8/25/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	9/6/2000
A	OILY DEBRIS	1300 P	VT02	
B	OIL FILTER MEDIA W/ FREE LIQ	110 G	VT02	
MAM123338	Shipped: 10/20/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	10/23/2000
A	VIBRATORY SLUDGE	1 Y	MA99	
MAM123488	Shipped: 11/8/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	11/8/2000
A	OILY FILTER MEDIA	400 P	VT02	
B	OILY DEBRIS	600 P	VT02	
MAM123415	Shipped: 12/6/2000	To: JONES ENVIRONMENTAL SERVICES	Received:	12/8/2000
A	VIBRATORY SLUDGE	2055 P	MA99	
CTF0891243	Shipped: 1/31/2001	To: CECOS TREATMENT CORP.	Received:	2/1/2001
A	POTASSIUM HYDROXIDE	55 G	D002	
B	POTASSIUM HYDROXIDE	75 G	D002	
C	TETRAPOTASSIUM PYROPHOSPHATE	15 G	VT99	
D	NON REG MATERIAL	600 P	NONE	
IL8448852	Shipped: 1/31/2001	To: CLEAN HARBORS SERVICES INC	Received:	2/9/2001
A	WASTE PAINT	220 G	D001	
MAM143974	Shipped: 2/20/2001	To: JONES ENVIRONMENTAL SERVICES	Received:	2/21/2001
A	VIBRATORY SLUDGE	1200 P	MA99	
B	VIBRATORY SLUDGE	1400 P	MA99	
CTF0942726	Shipped: 3/12/2001	To: UNITED INDUSTRIAL SERVICES INC	Received:	3/12/2001
A	MACHINE COOLING WATER	2580 G	CR04	
MAM142493	Shipped: 4/20/2001	To: JONES ENVIRONMENTAL SERVICES	Received:	4/24/2001
A	VIBRATORY SLUDGE	2000 P	MA99	
VT128360	Shipped: 5/7/2001	To: JONES ENVIRONMENTAL SERVICES	Received:	5/14/2001
A	OIL FILTER MEDIA W/FREE LIQUID	50 G	VT02	

B AM145675 <i>OK No HPR RES</i>	SOLIDS W/OIL	1000 P	VT02	
	Shipped: 6/22/2001	To: JONES ENVIRONMENTAL SERVICES		Received: 6/26/2001
B	OILY DEBRIS	2400 P	MA01 VT02	
C	OILY FILTER MEDIA	300 P	VT02 MA99	
CTF1013262	VIBRATORY SLUDGE	2800 P	MA99	
A	Shipped: 7/10/2001	To: UNITED INDUSTRIAL SERVICES INC		Received: 7/10/2001
MAQ030888	WASTE REGULATED WASTE	2000 G	CR04	
A	Shipped: 9/26/2001	To: CLEAN HARBORS OF BRAINTREE IN		Received: 10/7/2001
	CORROSIVE SOLID BASIC	1200 P	D002	
	SODIUM HYDROXIDE			
MAM146272	Shipped: 10/18/2001	To: JONES ENVIRONMENTAL SERVICES		Received: 10/19/2001
A	VIBRATORY SLUDGE	330 G	MA99	
MAM174635	Shipped: 12/17/2001	To: JONES ENVIRONMENTAL SERVICES		Received: 12/18/2001
A	OILY DEBRIS	1500 P	VT02 MA01	
B	VIBRATORY SLUDGE	2000 P	MA99	
C	OILY FILTER MEDIA	600 P	MA99 VT02	
MAM176024	Shipped: 3/27/2002	To: JONES ENVIRONMENTAL SERVICES		Received: 3/27/2002
A	OILY DEBRIS	600 P	MA01 VT02	
<i>OK No HPR RES</i>	OILY FILTER MEDIA	400 P	MA99 VT02	
	VIBRATORY SLUDGE	800 P	MA99	

PRTMANIF R1  
11/19/93MANIFESTED GENERATOR SHIPMENTS  
~~1/1/92~~ THROUGH 11/19/93  
12/30/91

Page 7

S- NAME: U.S.T., INC.  
El ID#: VTD082275959

BOWEN ROAD

NJA1348507	10/30/91 TO	NJD002182897	SAFETY-KLEEN CORP	2496 P VT02
	a. PET OIL			
NJA1333551	11/06/91 TO	NJD069039626	SAFETY-KLEEN CORP.	13 G D001
	a. NAPHTHA			
NJA1326006	12/12/91 TO	NJD002182897	SAFETY-KLEEN CORP	1680 P X726
	a. OIL			
NJA1333010	12/12/91 TO	NJD069039626	SAFETY-KLEEN CORP.	17 G D001
	a. NAPHTHA			
VT0044649	1/07/92 TO	VTD982766537	POLLUTION SOLUTIONS OF VERMONT	
	a. PAINT BOOTH SLUDGE			400 P DOMX
	b. OIL/WATER			165 G VT02
	c. OIL/DIRT			1200 P VT02
NJA1368958	1/30/92 TO	NJD069039626	SAFETY-KLEEN CORP.	17 G D001
	a. NAPHTHA LDR			
NYB2508687	2/13/92 TO	NYD043815703	FRONTIER CHEM. WASTE PROCESS	
	a. SULFURIC ACID			55 G D002
	b. SPEEDY DRY/OIL			55 G
	c. NON HAZ			110 G
NJA1347905	3/12/92 TO	NJD069039626	SAFETY-KLEEN CORP.	16 G D001
	a. PETROLEUM NAPHTHA			
NYC1580725	4/21/92 TO	NYD986872869	SAFETY-KLEEN CORP	86 P DOMX
	a. PETROLEUM NAPHTHA LDR			
NJA1350805	4/22/92 TO	NJD002182897	SAFETY-KLEEN CORP	420 P D018
	a. OILY WATER/ABSORBENTS LDR			
VT0041177	5/27/92 TO		CONSERVATION MANAGEMENT	
	a. OIL/SPEEDY			110 G VT02
NJA1452193	6/04/92 TO	NJD002182897	SAFETY-KLEEN CORP	420 P D018
	a. WATER/CORN COB			
NYC1662276	6/04/92 TO	NYD986872869	SAFETY-KLEEN CORP	131 P DOMX
	a. NAPHTHA			
CMIO000852	7/14/92 TO		CONSERVATION MANAGEMENT I	
FIS0011342	7/14/92 TO	ALD981020894	FISHER INDUSTRIAL SERVICE	
	a. XYL/TOL/PAINT			110 G MOMX
NYC1742337	7/16/92 TO	NYD986872869	SAFETY-KLEEN CORP	131 P DOMX
	a. NAPHTHA			
NYC1830982	8/24/92 TO	NYD986872869	SAFETY-KLEEN CORP	131 P DOMX
	a. MINERAL SPIRITS LDR			

PRTMANIF R1  
11/19/93

MANIFESTED GENERATOR SHIPMENTS  
1/1/92 THROUGH 11/19/93

Page 8

SHIP NAME: U.S.T., INC.  
E. ID#: VTD082275959

BOWEN ROAD

✓VT0045581	10/05/92 TO NYD981896923	SAFETY KLEEN OIL SERVICE	1595 G VT02
	a. OIL		
✓NYC1881775	10/06/92 TO NYD986872869	SAFETY-KLEEN CORP	131 P DOMX
	a. MINERAL SPIRITS <i>LDL</i>		
✓VT0045600	11/13/92 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. PAINT RELATED MATERIAL		316 P F005
	b. WASTE OIL		430 P VT02
	c. OILY WATER/CORN COB		350 P D018
✓NYC1961223	11/16/92 TO NYD986872869	SAFETY-KLEEN CORP	
	a. MINERAL SPIRITS		131 P DOMX
	b. ADJUST ABOVE TYPO-1000 P		1000 P
NYC2066466	12/28/92 TO NYD986872869	SAFETY-KLEEN CORP	
	a. MINERAL SPIRITS		131 P DOMX
✓VT0045587	2/04/93 TO NYD981876923	SAFETY KLEEN OIL SERVICE	1225 G VT02
	a. OIL		
✓NYC2150256	2/08/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. MINERAL SPIRITS <i>LDL ?</i>		23 G DOMX
✓VT0045560	2/11/93 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. PAINT RELATED MATERIAL		316 P F005
	b. WASTE OIL		862 P X726
✓NYC2213954	3/25/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA <i>LDL ?</i>		20 G DOMX
✓VT0045589	3/31/93 TO NYD981876923	SAFETY KLEEN OIL SERVICE	1125 G VT02
	a. OIL		
✓NYC2076838	4/07/93 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. PAINT RELATED MATERIAL		948 P F005
	b. HAZ SOLID		350 P D018
✓NYC2278991	5/06/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA		19 G DOMX
✓VT0052733	5/11/93 TO VTD982766537	POLLUTION SOLUTIONS OF VERMONT	
	a. OILY DEBRIS		400 P VT02
	b. GRINDING SLUDGE		550 P VT05
✓VT0045591	5/12/93 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. PAINT RELATED MATERIAL		320 P F005
	b. WASTE OIL		430 P X726
✓VT0045592	5/26/93 TO NYD981876923	SAFETY KLEEN OIL SERVICE	1225 G VT02
	a. USED OIL		
✓NYC2362847	6/16/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA		21 G DOMX

PRTMANIF R1  
11/19/93

MANIFESTED GENERATOR SHIPMENTS  
1/1/92 THROUGH 11/19/93

Page 9

ST NAME: U.S.T., INC.  
E. ID#: VTD082275959

BOWEN ROAD

✓ NJA1659200	7/08/93 TO NJD002182897	SAFETY-KLEEN CORP	
	a. WASTE OIL		430 P X726
✓ VT0045597	7/08/93 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. PAINT RELATED MATERIAL		632 P F005
	b. OILY WASTE		400 P D018
✓ VT0045596	7/23/93 TO NYD981876923	SAFETY KLEEN OIL SEVICE	
	a. USED OIL		1300 G VT02
✓ NYC2453411	7/29/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA		8 G DOMX
	b. NAPHTHA		14 G DOMX
✓ VT0059653	8/30/93 TO KYD053348108	SAFETY KLEEN ENVIROSYSTEMS CO.	
	a. HAZ SOLID		300 P D018
	b. PAINT RELATED MATERIAL		316 P F005
✓ NYC2516005	9/07/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA		8 G DOMX
	b. NAPHTHA		15 G DOMX
VT0045594	9/14/93 TO NYD981876923	SAFETY KLEEN OIL SEVICE	
	a. USED OIL		1625 G VT02
✓ NYA1741155	10/05/93 TO NJD002182897	SAFETY-KLEEN CORP	
	a. OIL		430 P X726
NYC2624275	10/18/93 TO NYD986872869	SAFETY-KLEEN CORP	
	a. NAPHTHA		8 G DOMX
	b. NAPHTHA		14 G DOMX
VT0045593	11/10/93 TO NYD981876923	SAFETY KLEEN OIL SEVICE	
NUMBER OF MANIFESTS		43	
TOTAL MANIFESTS		124	



AGENCY OF NATURAL RESOURCES  
COMPLAINT/SPILL REPORT

COMPLAINT #: 189-91  
DATE: \_\_\_\_\_  
DISTRICT: \_\_\_\_\_  
TOWN: \_\_\_\_\_  
PROGRAM: \_\_\_\_\_  
PRIORITY: \_\_\_\_\_  
INVESTIGATOR: \_\_\_\_\_

Date/Time: 8/9/91-16:00 Person Taking Report RFS

LOCATION OF SPILL INCIDENT:

Facility: UST Corp.  
Town/City: Bennington  
Road/Street/Highway: Bowen Rd.

PERSON MAKING REPORT:

Name/Organization: Chuck Merrill - Emergency Management  
Address: Watersbury 244-8721  
Telephone Number: (work) 244-8727 (home) \_\_\_\_\_

Emergency: \_\_\_\_\_ Yes ☐ No ☒

Nature of Incident: Report of 200ga. unknown chemical

Date/Time of Incident: 8/9/91 and ongoing

Type of Contaminant: Unknown Quantity at least 200ga.

Responsible Parties: UST Corp.

OTHER INFORMATION (Including Directions):

Caller works for UST but wants to remain anonymous. Unknown chemical dumped into storm sewer.

Case Assigned to: BCRA Date/Time: 8-

Actions Taken: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Case Closed: Date \_\_\_\_\_ Code: \_\_\_\_\_

AGENCY OF NATURAL RESOURCES  
COMPLAINT/SPILL REPORT

COMPLAINT #: 98-315  
DATE: \_\_\_\_\_  
DISTRICT: \_\_\_\_\_  
TOWN: \_\_\_\_\_  
PROGRAM: \_\_\_\_\_  
PRIORITY: \_\_\_\_\_  
INVESTIGATOR: \_\_\_\_\_  
DATE CLOSED: 8/21/98  
CLOSURE CODE: R

Date/Time: 8/20/98 2125 Person Taking Report: Tim C

LOCATION OF SPILL/INCIDENT:

Facility: U.S. Tsubaki Inc - Sprockets Division  
Road/Street/Highway: 119 Bowen Rd.  
Town/City: Bennington,

PERSON MAKING REPORT/COMPLAINANT:

Name/Organization: Randy Branson / EM  
Address: \_\_\_\_\_  
Telephone Number: (work): (802) 244-8721 (home): \_\_\_\_\_  
Emergency: Yes ☒ No  
Nature of Incident: Foam in Furnace Brook (Tributary of Walloomsac River)  
Date/Time of Incident: Ongoing since at least Tuesday  
Type of Contaminant: unk Quantity: unk  
Responsible Parties (RPs): US Tsubaki Inc - (UST Inc)  
RP's Telephone Number: (work): (802) 447-7561 (home): \_\_\_\_\_

OTHER INFORMATION (including directions): Foam in trib of Walloomsac. Seems to originate at beaver dam. Looks, smells, and "tastes" like soap. Dye test done by Bennington FD, LEPC, and Terry Aiken of Haz Mat Team. Dye poured into floor drain in UST came out at beaver dam. UST personnel think they know which machinery is causing release and shut it down. Tom DePollo of LEPC is contact (442-1030). There is a culvert along north side of factory that outlets @ beaver dam.

Case Assigned/Referred To: Water Quality Enforcement Date/Time: 8/21/98-133

ACTIONS TAKEN: The foam is a detergent. Unknown how long it's been released. Water Quality requested to call Tom DePollo. Map of location attached.

copies: white-file yellow-investigator pink-enforcement division





## State of Vermont

Department of Fish and Wildlife  
Department of Forests, Parks, and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICES FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
WASTE MANAGEMENT DIVISION  
103 South Main Street  
West Building  
Waterbury, VT 05671-0404

FAX 802-241-3296  
TEL 802-241-3888

August 30, 2005

U.S. Tsubaki, Inc.  
C/O CT Corporation System  
400 Cornerstone Dr ST240  
Williston, Vermont 05495

CERTIFIED MAIL  
7003 0500 0002 2237 8629

Subject: **Notice of Alleged Violation**  
EPA ID No VTD 082 275 959

First Letter  
SMS # 2004-3196

To Whom It May Concern:

Although U.S. Tsubaki certified that the facility located at 222 Bowen Road in Bennington, Vermont, was properly closed on August 6, 2004, on August 8, 2005, a representative of the Bennington County Industrial Corporation informed the Vermont Agency of Natural Resources, Waste Management Division (WMD) that the U.S. Tsubaki building still has widespread residual contamination on the interior surfaces of the structure. The purpose of this letter is to notify you that the Agency of Natural Resources believes that U.S. Tsubaki is in violation of the following Vermont Hazardous Waste Management Regulations (VHWMR) described below:

- VHWMR Section 7-309(c)(3):

(c) Closure

- (3) A generator who no longer generates or manages hazardous waste at a site shall remove all hazardous waste to a designated facility. Remaining containers, tanks, liners, bases, materials, equipment, structures, soil and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility.

**Alleged Violation:** On December 5, 2003, John Miller of this office sent a letter to Mr. Charles Brendese of U.S. Tsubaki, outlining the necessary steps for the proper closure of the U.S. Tsubaki building. A "Certification of Facility Closure – Basic" for the U.S. Tsubaki facility was received from Michelle Schmid of United States Compliance on August 10, 2004. The certification was signed by Mr. Eddie Teng of U.S. Tsubaki. Based on the information submitted by U.S. Tsubaki, Inc, the WMD confirmed facility closure in a letter dated November 1, 2004, from Lynn Metcalf of this office to Mr. Eddie Teng of U.S. Tsubaki.

While the "Certification of Facility Closure - Basic" submitted by U.S. Tsubaki in August of 2004, certified that the closure had been completed in compliance with the provisions of the VHWMR Section 7-309(c), this form did not identify that any efforts were made to clean the structure as required by VHWMR Section 7-309(c)(3). This Agency has now received complaints that there is an "industrial residue" on the interior walls and surfaces of the building. Therefore, U.S. Tsubaki was and is not in compliance with the requirement of 7-309(c)(3) that "remaining containers, tanks, liners, bases, materials, *equipment, structures*, soil and debris contaminated with *hazardous waste or hazardous waste residues* shall be decontaminated or disposed of at a designated facility."

In response to the alleged violations described above and pursuant to 10 V.S.A. Section 8008, the Agency may issue an Administrative Enforcement Order which, among other things, would: assess penalties, require correction and/or remediation of the alleged violations and require other measures as deemed appropriate. Your correction of the alleged violations may lessen the possibility or severity of any enforcement action which may be taken by the Agency.

**Requested Action:** Within 35 days from the signing of this letter, submit a workplan for the complete closure of the U.S. Tsubaki facility at 222 Bowen Road in Bennington, Vermont. This workplan must address all requirements of VHWMR Section 7-309(c), including the decontamination of all remaining equipment, fixtures, tanks, and structures.

If you have any questions concerning this Notice of Alleged Violation, please contact Peter Marshall at (802) 241-3868 or by electronic mail at [peter.marshall@state.vt.us](mailto:peter.marshall@state.vt.us).

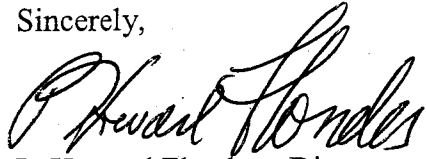
Although US Tsubaki has received a Sites Management Activities Complete designation based on the new findings we are requesting that an additional Phase II be conducted. Therefore the WMD is requesting that US Tsubaki hire an environmental consultant to prepare a workplan in accordance with the Site Investigation Procedures Dated June 2005 to address the potential impact to soil and groundwater at the site. This workplan needs to be received by Patricia Coppolino of the WMD within 35 days from the signing of this letter. This work is being required pursuant to Title 10 Part 5 Chapter 159 Section 6617(a) of Vermont Statute, "**Any person who has knowledge of a release or a suspected release and who may be subject to liability for a release, as detailed in section 6615 of this chapter, shall immediately notify the agency**" (Vermont Agency of Natural Resources-

WMD). The WMD assumes that US Tsubaki, as site owner, is the potentially responsible party.

With the notification of the possible releases, through several complaints, there comes a responsibility to take action to mitigate the effects of the possible release (10.V.S.A. Section 6615b Corrective action procedures). The statute describes a series of actions, from investigation through corrective action, which must be taken by potentially responsible parties.

This First Letter is addressed to responsible parties whenever indications exist that there has been a potential release to the environment. The First Letter represents the beginning of the process of identifying, characterizing, and remediating contaminated sites in Vermont. Please use the following site number that has been assigned to the US Tsubaki property for tracking purposes: SMS # 2004-3196.

Sincerely,



P. Howard Flanders, Director  
Waste Management Division

cc: Peter Marshall, Chief  
Hazardous Waste Management Section, WMD

George Desch, Chief  
Sites Management Section, WMD

Patricia Coppolino, Environmental Analyst  
Brownfields Redevelopment Program, WMD

Peter Odierna, Executive Director  
Bennington County Industrial Corporation



CERTIFICATION OF FACILITY CLOSURE - BASIC

Check one: ☒ Complete Closure    ☐ Continued Use Closure

Facility Name: U.S. Tsubaki, Inc.

US EPA ID No. VTD082275959

Owner/Operator <u>U.S. Tsubaki, Inc.</u>	Property Owner _____
Street Address <u>119 Bowen Road</u>	Street Address _____
Town, State, zip <u>Bennington, VT 05201</u>	Town, State, Zip _____

Listing of Contaminants of Concern:

Hazardous Materials Used	MSDS Available Y/N	Hazardous Wastes Produced	Conditional Exemption Used? Y/N
Propylene/Propane	Y	State Regulated Waste Oil	N
Raw Steel	Y	Corrosive Liquid	N
		Flammable Liquid	N

\*\*\* List additional materials and wastes on the back of this page

Cleanout Activities Completed: (check all applicable items)

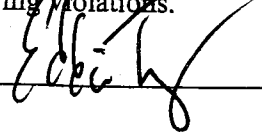
except Propane)    ☒ hazardous materials removed    ☒ hazardous waste removed  
☒ Sweep    ☐ Power Wash    ☐ Other \_\_\_\_\_  
☐ Laboratory testing    ☐ copy of test results attached


Date of Final Hazardous Waste Shipment: 7-8-2004    Manifest No. VT0133038 0625905

Certification:

I certify that the facility identified above has been closed in accordance with the provisions of Vermont Hazardous Waste Management Regulations Section 7-309(c).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:     Date: 8/6/04

	<b>VT HAZARDOUS WASTE HANDLER SITE ID FORM</b>		<b>Shaded box for VT DEC Office Use Only</b>	
	Please return completed form to:  VT DEC Waste Management Division 103 South Main Street/West Bldg Waterbury, Vermont 05671-0404 (802) 241-3888  www.anr.state.vt.us/dec/wastediv/rcra/rcrahome.htm		Date In: 8/10/04  Date Complete: 8/13/04 (LM) File #: 02-02-066 Unique #: 16815	
# refers to page of instructions	<b>EPA ID Number:</b> VT082275959			
<b>1. Reason for Submittal (p 2)</b> Mark Correct Box(es)	<input type="checkbox"/> To provide <b>initial notification</b> (to obtain an EPA ID Number for hazardous waste, including used oil, or universal waste activities). <input checked="" type="checkbox"/> To provide <b>subsequent notification</b> (to update site identification information). Reason: <u>facility closure</u> <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/> As a component of a revised RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/> As a component of the Hazardous Waste Report			
<b>2. Site Name (p 2)</b>	<b>Name:</b> U.S. Tsubaki, Inc.			
<b>3. Site Location Information (p 2)</b>	<b>Street Address (not P.O Box):</b> 119 Bowen Road			
	<b>City or Town:</b> Bennington		<b>State:</b> Vermont	
	<b>County Name:</b> Bennington		<b>Zip Code:</b> 05201	
<b>4. Site Land Type</b>	<input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other _____			
<b>5. North American Industry Classification System (NAICS) Code(s) for Site</b>	<b>A.</b> 33361		<b>B.</b>	
	<b>C.</b>		<b>D.</b>	
<b>6. Site Mailing Address (p 3)</b>	<b>Number and Street or P. O. Box:</b> <input checked="" type="checkbox"/> Same as 3, above or:			
	<b>City or Town:</b>			
	<b>State:</b>		<b>Country:</b> <b>Zip Code:</b>	
<b>7. Site Contact Person (p 3)</b>	<b>First Name:</b> Eddie	<b>Last Name:</b> Teng	<b>Title:</b> Human Resource Generalist	
	<b>Phone Number:</b> 847-459-9500		<b>Phone Extension:</b>	
<b>8. Legal Owner and Operator of the Site (p 3)</b>  (List additional owners or operators in Item 13-Comments)	<b>Name of Site Land Owner:</b> U.S. Tsubaki, Inc.		<b>Date Became Owner (mm/dd/yyyy):</b> 4-7-77	
	<b>Name of Site Business Owner:</b> U.S. Tsubaki, Inc.		<b>Date Became Owner (mm/dd/yyyy):</b> 4-7-77	
	<b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other _____			
	<b>Name of Site's Operator:</b> U.S. Tsubaki, Inc. Plant Manager		<b>Date Became Operator (mm/dd/yyyy):</b> October 1977	
		<b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other _____		



**9. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes):****A. Hazardous Waste Activities:** *none***1. Generator of Hazardous Waste (p 4)**  
(Choose only one of the following three categories.)

- ☐ a. Large Quantity Generator: 1,000 kg (2,200 lbs.) or greater of *non-acute* hazardous waste generated in a calendar month, or 1 kg (2.2 lbs) or greater of *acute* waste
- ☒ b. Small Quantity Generator: 100 to 1,000 kg/mo (220 - 2,200 lbs.) of *non-acute* hazardous waste; less than 1 kg (2.2 lbs) of acute waste
- ☐ c. Conditionally Exempt Generator: Less than 100 kg/mo (220 lbs) of *non-acute* hazardous waste; accumulate less than 1000 kg (2200 lbs) total hazardous waste

In addition, indicate other generator activities (p 4) (check all that apply).

- ☐ d. United States Importer of Hazardous Waste
- ☐ e. Mixed Waste (hazardous and radioactive) Generator

For Items 2 through 6, check all that apply (p 5).

- ☐ 2. **Transporter of Hazardous Waste** Note: A hazardous waste transporter permit is required for this activity.
- ☐ 2a. **Hazardous Waste Transfer Facility**
- ☐ 3. **Treater, Storer, or Disposer of Hazardous Waste (at your site)** Note: A hazardous waste facility certification is required for this activity.
- ☐ 4. **Recycler of Hazardous Waste (at your site)** Note: A hazardous waste permit may be required for this activity.
5. **Exempt Boiler and/or Industrial Furnace**
- ☐ Small-Quantity On-site Burning Exemption
- ☐ Smelting, Melting, and Refining Furnace Exemption

**B. Universal Waste Activities (p 5):**

- ☐ 1. **Large Quantity Handler of Universal Waste** (accumulate 5000 kg or more)  
Mark all that apply:

- a. Batteries ☐
- b. Pesticides ☐
- c. Thermostats ☐
- d. Lamps ☐
- e. Light Ballasts ☐

- ☐ 2. **Destination Facility for Universal Waste**  
Note: A hazardous waste permit may be required for this activity.

**C. Used Oil Activities (p 6):****1. Used Oil Transporter - Indicate Type(s) of Activity(ies)**

- ☐ a. Transporter
- ☐ b. Transfer Facility

**2. Used Oil Processor and/or Re-refiner - Indicate Type(s) of Activity(ies)**

- ☐ a. Processor
- ☐ b. Re-refiner

**3. Used Oil Burner**

- ☐ a. Off-Specification
- ☐ b. Specification

If used oil is received from offsite, please list name &amp; address of source \_\_\_\_\_

**4. Used Oil generator/marketer that gives or sells used oil to others to burn**

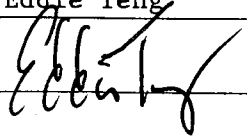
- ☐ a. Off-Specification
- ☐ b. Specification

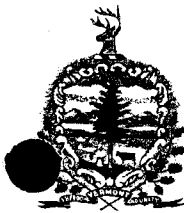
(Please list burner(s) name &amp; address): \_\_\_\_\_

**5. Used Oil Fuel Marketer - Indicate Type(s) of Activity(ies)**

- ☐ Marketer who collects and blends or processes used oil collected
- ☐ Marketer who collects and distributes used oil collected

**6. ☐ Used Oil generator that sends used oil to be re-refined****7. ☐ Used Oil Collection Facility**

EPA ID No. VTD082275959		
<b>10. Description of Hazardous Wastes (p 7):</b> Please list the waste name, waste codes and estimated monthly quantity of the hazardous waste handled at your site. Use all waste codes for each waste stream (federal waste codes take precedence over state waste codes). Use an additional page if more spaces are needed. For long lists, please list waste codes in alphanumeric order.		
Waste Name	EPA/State Waste Codes	Estimated Monthly Quantity
Waste Corrosive Liquid (Basic)	D002	110 gallons
Waste Flammable Liquid	D001	10 lbs
Waste Corrosive Liquid (Acidic)	D002	10 lbs
<b>11. Does your company own other facilities or have affiliates in Vermont?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please list name(s) & location(s):		
<b>12. If this document was prepared by a contractor/transporter on behalf of the hazardous waste handler, please list your contact information including name, company name, phone and fax numbers:</b>		
<b>13. Comments:</b>		
<b>14. Certification.</b> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Signature of owner, operator, or an authorized representative	Name and official title (type or print) of owner, operator, or an authorized representative	Date Signed (mm-dd-yyyy)
Eddie Teng	Human Resource Generalist	
		8/6/04



# State of Vermont

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
Management and Prevention Section  
Waste Management Division  
103 South Main Street/West Office Building  
Waterbury, Vermont 05671-0404  
(802) 241-3888  
FAX: (802) 241-3296  
[www.anr.state.vt.us/dec/wmd.htm](http://www.anr.state.vt.us/dec/wmd.htm)

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

December 5, 2003

Mr. Charles Brendese, Facility Manager  
U.S. Tsubaki, Inc.  
222 Bowen Road  
Bennington, Vermont 05201

RE: Pending Closure of the U.S. Tsubaki, Inc. Plant in Bennington, Vermont  
Vermont Generator ID No. S-02-02-066 US EPA ID No. VTD 082 275 959

Dear Mr. Brendese:

Recently, the Vermont Agency of Natural Resources, Waste Management Division received a report of the pending closure of the U.S. Tsubaki, Inc. plant in Bennington, Vermont. Consequently, the purpose of this letter is to remind you of the Vermont Hazardous Waste Management Regulations' (VHWMR) requirements for closure of hazardous waste generator facilities. Section 7-309(c) of the regulations reads as follows:

7-309 GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

(c) Closure \* \* \*

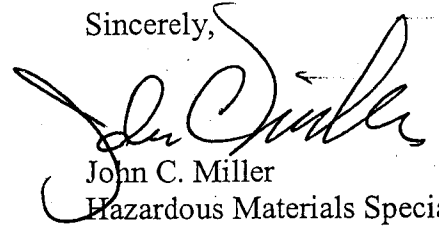
- (1) A generator who no longer generates or manages hazardous waste at a site must close the site in a manner that:
  - (A) Minimizes the need for further maintenance;
  - (B) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the groundwater or surface waters or to the atmosphere; and
  - (C) Complies with the closure requirements of this subchapter including but not limited to the requirements of 40 CFR Sections 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, and 265.404.
- (2) A generator who no longer generates or manages hazardous waste at a site shall remove all hazardous waste to a designated facility. Remaining containers, tanks, liners, bases, materials, equipment, structures, soil and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility
- (3) A generator shall provide written notice to the Secretary prior to closure and shall submit to the Secretary, within 90 days of completion of closure, certification that closure was completed in accordance with the provisions of subsections (1) and (2) above. This certification shall be made by the generator and the Secretary may require certification by an independent professional engineer licensed in Vermont.

Mr. Charles Brendese, U.S. Tsubaki, Inc.  
RE: Closure of plant in Bennington, Vermont

December 5, 2003  
Page 2

Enclosed with this letter is a copy of a draft guidance document that has been prepared to help hazardous waste generators adequately close their facilities. If you have any questions about this letter or other hazardous waste management issues, please feel free to contact me by mail at the address given above, by telephone at 241-3487 or by e-mail at [john.miller@anr.state.vt.us](mailto:john.miller@anr.state.vt.us).

Sincerely,



John C. Miller  
Hazardous Materials Specialist

Encl: Guidance for Approval of Closure Certifications (Revised: DRAFT November 2003)

Need a Job?

Click here for VermontClassified.com

Looking for a recent High School Sports Photo?

CLICK HERE!

RUTLAND HERALD

online edition

RUTLAND, VERMONT, U.S.A.

Wednesday, December 3, 2003

SEARCH

Search the Herald

NEWS

At a glance

Front Page

Rutland County

Southern Vermont

State

Local Sports

National Sports

Obituaries

Business

People and Places

Calendar

Weather

FEATURES

Weddings

Photo Gallery

Sunday

Mag

The

Home and Garden

Weekend

Movies

Outdoors

Crossword

OPINION

Editorials

Columns

Letters

Submit a Letter

CLASSIFIEDS

All Classifieds

Jobs

Auto

Real Estate Rentals

Real Estate for Sale

Current Advertisers

Personals

THE WIRE

Top Stories

National

World

National Business

National Sports

SERVICES

Contact Us

Subscribe

Purchase a Photo

# Tsubaki to close Bennington factory

December 3, 2003

By PETER CRABTREE

Herald Staff

BENNINGTON - A Japan-based manufacturer will close its Bennington plant next year and move some jobs to Canada.

The closing will affect about 70 employees at U.S. Tsubaki's local plant, the company announced Monday.

The Tsubakimoto Chain Co. is consolidating its North American sprocket manufacturing business in Mississauga, Ontario, adding more than 40 jobs there.

"We expect to improve our competitive position while increasing our focus on this important market segment," said Michael Manty, a senior vice president, in a prepared statement.

U.S. Tsubaki opened its Bennington factory in 1977. At one time it employed 165 people and had an annual payroll of more than \$5 million. Its average wage is now \$16 per hour, according to local officials.

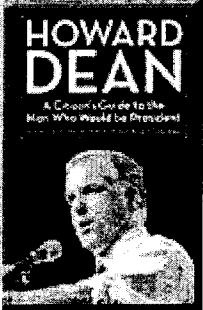
"The Bennington factory has been a part of U.S. Tsubaki for a long time, and we regret any hardship that this decision will create for our employees and the community," Manty said.

The plant is due to shut down in September. Some workers will be let go before then.

State officials said Tuesday that they planned to meet with UST employees in the next few weeks to offer help in finding new jobs. Those workers could qualify for extended unemployment benefits and other aid if the U.S. Department of Labor certifies that the job losses were due to foreign imports or a shift in production to Canada. Workers at the former Johnson Controls battery factory and Stanley Tools plant in Shaftsbury received such help when their jobs were moved to Mexico and overseas.

Local officials said Tuesday that the loss of UST was another blow to Bennington's manufacturing base. And they expressed sympathy for the skilled

Now Available ...



Click here to order

machinists and others who will soon be without paychecks. But things could be worse, they said.

Despite several high-profile plant closings in the past 15 years, the Bennington area has managed to retain jobs and add new ones in the face of spirited competition from other states, according to Stephen Engle of the state Department of Employment and Training.

Vishay, Moore Wallace and Furon and are among the companies that have chosen to remain in Bennington County and nearby Hoosick Falls, N.Y., rather than consolidate operations in the Midwest and elsewhere, Engle said.

"What isn't commonly known is the Bennington area has won those battles," said Engle, an employer resource consultant.

Bennington County's unemployment rate stood at 3.6 percent in October, compared to a statewide average of 3.3 percent. There are now about 150 jobs listed with the DET's Bennington office.

"Obviously, manufacturing everywhere is maybe a little more anemic than we might like," Lawrence Sudlow, the DET's district manager, said. "But there are jobs to be had. These are people with good skills. I trust we'll be able to help them market their skills."

Mississauga borders Toronto and is Canada's sixth-largest city with a population of 630,000. Tsubaki of Canada, Ltd., employs between 100 and 299 people at its factory there, according to Susan Amring, the city's manager of business attraction. Both Vermont and Bennington extended tax incentives to UST over the years to help it prosper, according to officials.

"For a number of years they've been under pressure from offshore competition," said Lance Matteson, executive director of the Bennington County Industrial Corp. "We've tried very hard to do everything we can with the state and the town to make it possible for them to survive here and we failed. The fundamental problem had nothing to do with incentives or workforce or the plant's location so much as the global situation and their competitive position.

"They've tried hard to do their best and beat the odds. But they're in a mode where they felt a need to consolidate and downsize," Matteson said. "Unfortunately, we were on the losing end of that business judgment."

Calls to UST's Wheeling, Ill., headquarters were not returned Tuesday.

Contact Peter Crabtree at [peter.crabtree@rutlandherald.com](mailto:peter.crabtree@rutlandherald.com).

[Back](#)

[Printable Version](#)



Need new  
Wheels?  
Check Us Out...

Wondering What's happening  
in Vermont's news?  
We Know! See [VermontToday.com](http://VermontToday.com)





[Contact Us](#)





PM



September 20, 2002

Mr. P. Howard Flanders  
Director, Waste Management Division  
State of Vermont  
Agency of Natural Resources  
103 S. Main Street  
West Office Bldg.  
Waterbury, VT 05671-0404

Dear Mr. Flanders,

The following are U.S. Tsubaki's written responses to the observations made during your Agency's visit on June 26, 2002 to our facility. Please note the original responses were emailed to your Agency on 7/10/02.

Regulation #	Observation	Response
7-203	Rags for laundering must be kept in a labeled, closed container	Lid purchased & installed on container indicates "Dirty Rags Only"
7-311(d1)	Hazardous Waste Inventory not kept apart from other wastes	Inventories separated & logged
7-309(a1b)	Access to emergency communication system not available	Buzzer/horn installed & area identified
7-310(a5)	Recommendation for labeling containers Hazardous Waste in satellite locations	Satellite storage containers labeled & operators instructed
7-309(a4a)	Documentation of arrangements with Police and Fire Depts.	Letters of invitation have been sent to local emergency authorities.



Page 2

Mr. P Howard Flanders

Additionally, the local fire department will visit our facility on 9/24/02 at 7 p.m.  
The facility tour will consist of the following:

- Review inventory of hazardous waste
- Hazardous waste area
- Fire alarm system
- Emergency Response Notification
- Evacuation Route

If you need clarification on any of the above information, please contact Penny Galusha or myself.

Respectfully,

U.S. TSUBAKI, INC.  
P T COMPONENTS DIV.



Charles Brendese  
Facility Manager

CB:sw



# State of Vermont

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

## AGENCY OF NATURAL RESOURCES Department of Environmental Conservation

Management and Prevention Section  
Waste Management Division  
103 South Main Street/West Office Building  
Waterbury, Vermont 05671-0404  
(802) 241-3888  
FAX: (802) 241-3296  
[www.anr.state.vt.us/dec/wmd.htm](http://www.anr.state.vt.us/dec/wmd.htm)

Date: Aug 22, 2002

Mr. Charles Brendese, Facility Manager  
U.S. Tsubaki, Inc.  
222 Bowen Road  
Bennington, Vermont 05201

CERTIFIED MAIL  
700 0600 0027 4346 1615

SUBJECT: **Notice of Alleged Violation**  
Generator ID N<sup>o</sup> S-02-02-066

EPA ID N<sup>o</sup> VTD 082 275 959

Dear Mr. Brendese:

On June 26, 2002, a representative of the Vermont Agency of Natural Resources, Waste Management Division (WMD), conducted a compliance evaluation inspection at U.S. Tsubaki, Inc. of Bennington, Vermont. The purpose of this letter is to notify you that the Agency of Natural Resources believes that on the date of the inspection U.S. Tsubaki, Inc. was in violation of the following Vermont Hazardous Waste Management Regulations (VHWMR) described below:

- VHWMR Section 7-203(x)(2)(B):

### 7-203 GENERAL EXEMPTIONS

*The following wastes are exempted from the provisions of these regulations:*

\* \* \*

- (x) *Reusable absorbent material contaminated with used oil that does not exhibit a hazardous waste characteristic provided that:*

\* \* \*

- (2) *The contaminated absorbent material is picked up, cleaned, and delivered back to the generator under a contractual agreement with a commercial laundering service and:*

\* \* \*

- (B) *Prior to being picked up by the launderer, the absorbent material is:*

- (i) *Stored in closed bags or other containers in an area on-site that meets the design standards of Section 7-311(a)(1) through (4); and*
- (ii) *Identified as used absorbent material destined for laundering.*

**Alleged Violation:** Oily (hazardous waste code: VT02) wipes observed accumulating in the tool crib prior to shipment for commercial laundering were stored neither as hazardous wastes nor in a manner meeting the requirements for exemption from management as a hazardous waste. The container used for collecting the rags was unlabeled and uncovered.

HRS Reference #109

• VHWMR Sections 7-309(a)(1)(B) and (a)(3)(A):

7-309 GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

(a) Preparedness and Prevention

*Small and large quantity generator facilities must be maintained and operated to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.*

(1) Required equipment

*All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:*

\* \* \*

(B) *A device, such as a telephone, immediately available at the scene of operations, or a hand held two-way radio, capable of summoning emergency assistance from local police departments, fire departments or state or local emergency response teams;*

AND

(3) Access to communications or alarm system

(A) *Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Section 7-309(a)(1).*

**Alleged Violation:** Access to an emergency communications system was not immediately available to workers at the short term hazardous waste storage area.

• VHWMR Sections 7-311(d)(1) and (d)(2)(D):

7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

\* \* \*

(d) Inventory and Inspection

(1) *Small and large quantity generators shall maintain, at a location apart from the short-term storage area, a list of all hazardous waste currently in storage. For generators storing hazardous waste in containers, the list shall identify each container being stored and the type of hazardous waste held by each container.*

AND

- (2) *Small and large quantity generators shall conduct daily inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log which shall be kept at the facility for at least three years. The log shall contain a checklist of the items to be inspected which shall include:*

\* \* \*

- (D) *Description of discrepancies or problem areas encountered in the inspection and the corrective actions taken;*

**Alleged Violations:** An inventory of hazardous wastes in the short term hazardous waste storage area was not being maintained. Therefore, it was not possible to determine how long hazardous wastes had been in storage, in particular, two 30-gallon containers of corrosive waste (D002). Also, daily inspections of the short term hazardous waste storage area were not being consistently performed or logs maintained as required. In addition, the daily inspection log sheet in use did not contain a section to identify problems encountered or corrective actions taken.

Also noted during the course of the inspection were four additional areas of concern. Specifically:

- [1] In the short term hazardous waste storage area, non-waste materials stored nearby were impinging on the minimum 24" aisle space required by VHWMR Section 7-311(b)(3);
- [2] Although hazardous waste storage area signs required by VHWMR Section 7-311(e) were posted at the short-term hazardous waste storage area, these signs were not visible at a distance of 25" in all directions from which the wastes might be approached;
- [3] In the manufacturing cells, the satellite accumulation drums for water soluble coolant skimmings were not labeled as required by VHWMR Section 7-310(a)(5) or as allowed under the exemption created by VHWMR Section 7-203(1); and
- [4] Although U.S. Tsubaki has on file documentation of its Hazard Communication Program filings with local authorities, record of arrangements made with local emergency services providers, as required by VHWMR Section 7-309(a)(4)(A) were not available for review.

In response to the alleged violations described above and pursuant to 10 V.S.A. Section 8008, the Agency may issue an Administrative Enforcement Order which, among other things, would: assess penalties, require correction and/or remediation of the alleged violations and require other measures as deemed appropriate. Your prompt response to this NOAV or correction of the alleged violations, through the actions requested below or by other acceptable means, may lessen the possibility or severity of any enforcement action which may be taken by the Agency.

**Requested Action:** The Division acknowledges your submittal in response to the findings outlined on the inspection Closing Conference Log and received by this office on July 10, 2002. Nevertheless, please provide any additional written certification you feel is necessary within thirty five (35) days from the signing of this letter verifying that the necessary modifications have been made to your hazardous waste management program. In your response, please describe the specific modifications that have been made to your hazardous waste management program to correct each alleged violation cited above.

Notice of Alleged Violation: U.S. Tsubaki, Inc., Bennington, Vermont (VT ID #S-02-02-066)  
RCRA Inspection on June 26, 2002  
Page 4

A follow-up inspection may be conducted shortly after this date.

If you have any questions regarding this Notice of Alleged Violation please contact John Miller of the Management and Prevention Section at the address given above, by telephone at 241-3487, or by electronic mail using [john.miller@state.vt.us](mailto:john.miller@state.vt.us).

Sincerely,



P. Howard Flanders  
Director, Waste Management Division

cc: RCRAInfo

RCRA INSPECTION REPORT

I. GENERAL INFORMATION:

File: S-02-02-066  
Company: U.S. Tsubaki, Inc.  
Address: 222 Bowen Road  
Bennington, Vermont 05201  
Telephone: (802) 447-7561 {Facsimile: (802) 447-0755}

Company Officials Interviewed: Charles Brendese (CB), Facility Manager  
Kenneth Bishop (KB), Maintenance Supervisor  
State Official Conducting Inspection: John Miller, Waste Management Division (WMD)

Type of Inspection: Compliance Evaluation Inspection

Date of Inspection: June 26, 2002  
Last Inspection Date: August 31, 1994

Trip Report Drafted: August 6, 2002

II. RCRA REPORTING/INFORMATION REQUIREMENTS:

Facility EPA ID N°: VTD 082 275 959

Type of Operation: Sprocket manufacture

Notification Date: April 14, 1986

Source Classification: Small Quantity Generator (100-1,000 Kg/month)

III. INSPECTION SCHEDULE:

I arrived and signed in at the front desk at about 8:50 a.m. Charles Brendese met me there and escorted me to his office. I explained that I was on-site to conduct an inspection to evaluate compliance with Vermont's Hazardous Waste Management Regulations (VHWMR). The inspection included an introductory conference with CB, a review of facility records associated with the hazardous waste program, a walk-through of the manufacturing and storage areas, and a brief concluding conference with CB. I gave CB a copy of the closing conference log at the end of the session (Attachment 1). I left the facility at 1:45 p.m.

IV. SOURCE DESCRIPTION:

U.S. Tsubaki, Inc. (UST) was established in Bennington in April of 1977. Approximately 100 employees work two shifts/day, five days/week. The facility manufactures sprockets for Tsubaki Chains, Inc. The corporate headquarters are in Wheeling, Illinois.

Manufacturing begins with the rough cutting of sheet and bar stock. Raw materials are cut either with screw machines or with lathes. Once cut to size, holes are cut in the blanks prior to milling (hobbing). Water soluble coolants are used almost exclusively in the cutting and milling processes. The blanks are milled to create sprockets which are then deburred with abrasive belts and wire brushes. Some parts are also drilled, tapped and welded to meet specific customer requirements.

Once parts meet specification, they receive a finish coating to prevent oxidation during storage. Finishes are either spray applied in a powder coating booth or applied using a black oxide dip coating process. With the exception of black oxide coating, powder coating and the broaching machines, the plant uses a cell manufacturing structure to produce its products.

Waste streams generated include:

Used oil - hydraulic oils from machinery drip pans and equipment maintenance  
- skimmings from cutting machine water soluble coolant and from the water soluble coolant evaporator unit  
- from centrifuging metal scraps which are produced by cutting and milling  
Oily debris (VT02) - absorbent materials from clean up of spills and leaks in the manufacturing area  
- filter media and grinding sludge from the tool room hobb machines and surface grinder  
Corrosive wastes (D002) from parts cleaning operations and the black oxide coating process.

Used shop rags are sent to a commercial laundry for cleaning.

#### V. GENERAL OBSERVATIONS:

After the introductory conference, I began a review of the company's hazardous waste management documents and filled out a multi-media inspection checklist (Attachment 2). CB completed a Notification of Regulated Waste Activity form during the site visit to document UST's change in contact person and 911 mailing address (Attachment 3). After that, we began the facility walk-through at about 11:00 a.m. CB pointed out that since the last inspection UST has converted its manufacturing operations, with the exception of the broach machine, black oxide dip line, and powder coating unit, to a cell structure where each cell is responsible for all the steps in manufacturing product for a specific order. Refer to Section VII of this report for specific details regarding waste containers observed, either accumulating or in storage, during the facility walk-through.

We arrived at the designated short-term storage area on the "chip dock" (a loading dock) at about 11:15 a.m. "Danger Hazardous Waste..." and "No Smoking" signs were posted on the wall above and behind the area designated for hazardous waste storage. However, the chip dock is located on an 'el' off the manufacturing space, so that it is not possible to see these signs until entering the loading dock itself. A fire extinguisher and spill clean-up equipment were available, but access to a telephone or other emergency communication was not immediately available. About forty (40) feet away, next to an emergency exit door, was a locked box with a walkie talkie which is to be used during any emergency evacuation of the building. The two key maintenance personnel, Donald

Thompson and Kenneth Bishop, have keys to this box. Also, aisle space in the short term hazardous waste storage area was barely adequate because other non-waste materials stored nearby were impinging on the waste storage area. While in the short term storage area, I asked to see the hazardous waste inventory and daily inspection logs and was shown a clipboard containing a number of older monthly inspection log sheets, but none that had been completed recently. Also, the checklist on the clipboard did not have a space for noting problems observed. This proved to be somewhat problematic because in the short term area were two 30-gallon drums of D002 corrosive waste, with the oldest showing an accumulation date of 9/05/01. Although CB was sure that all full drums went out on the previous shipment, he was unable to produce a hazardous waste inventory that resolved the question of how long the wastes had actually been in storage. KB was also in the area and explained that the oldest drum was an overpack of a 5-gallon satellite accumulation container which had been moved to the storage area less than sixty days prior to the inspection date and that the date he had put on the drum was the date that the container had first started to accumulate waste.

Before returning to CB's office, we inspected the plant's powder coating process equipment which has replaced the use of a paint booth and solvent-based paints. No hazardous wastes were observed in this area. Also, we visited the tool crib where used shop rags sent out for laundering were collected. The laundry company's bag was suspended in an unlabeled, open top 55-gallon drum. After the walk-through, CB and I returned to his office and I began preparations for the closing conference.

#### VI. DOCUMENT REVIEW:

- A. Training Records: Employee training was last conducted by Nelson Environmental personnel on April 22, 2002 for key maintenance personnel. Training records and documents are kept on file as required.
- B. Emergency Preparedness: Although the plant maintained documentation of its Hazard Communication Program's Tier II reporting to local authorities (Attachment 4), it had no similar documentation for updates of its emergency procedures or contacts lists.
- C. Manifests: Prior to the inspection, a list of manifests generated by the facility since 01/01/1999 was prepared. This list was then used at the time of the inspection as a reference for evaluating the manifests on file (Attachment 5). Five manifests from the group of thirty-eight were selected for review. All manifests reviewed were complete.
- D. Inspection Logs: Daily inspection logs were not being maintained in a consistent manner. The checklist is missing elements regarding problems noted. all other requirements of § 7-311(d)(2) are addressed in the checklist. However, the inspection and inventory logs were little more than a jumble of papers on a clipboard.



- E. Inventory Logs: The inventory log was sort of maintained at the short term area.  
The inventory was not accurate at the time of inspection.
- F. Land Disposal Restriction (LDR) Copies of the LDR notifications, when required, were available for each manifest reviewed. All notifications reviewed met the § 7-106 requirements.

VII. WASTES IN STORAGE:

The following wastes were observed to be accumulating at the facility:

No. of 55-gallon Drums	Type of Waste	EPA Code	Marked and Labeled	Remarks
1	used oil/WS coolant	NA	no	1 drum/mfg cell, total of 5 in plant. moved to coolant evaporator when filled in tool crib. Open top drum with collection bag in it
1	rags for laundering	NA	no	

The following containers were observed inside the short-term storage area during the inspection:

No. and size of Containers	Type of Waste	EPA Code	Date of Accumulation	Marked and Labeled	Remarks
2-55 gal	Oily Debris	VT02	4/2/02	yes	1 drum no accumulation date
3-55 gal	Used oil	NA	NA	yes	
1-55 gal	Oil dip	missing	6/12/02	yes	
2-30 gal	Corrosive waste	D002	9/5/01	yes	only waste code missing, may be shipped as used oil 1 full and 1 overpack. Claim start date used on overpack instead of date put in storage. i.e. <60 days

VIII. CLOSING CONFERENCE:

I told CB that I observed the following:

- Used rags for laundering need to be kept in a closed and labeled container in order to be eligible for the VHWMR Section 7-203(x) exemption
- The inventory of hazardous wastes in the short term hazardous waste storage area was not being maintained at a location apart from that storage area [Section 7-311(d)(1)]
- The hazardous waste daily inspection log was missing a section for problems discovered and was not being consistently maintained [Section 7-311(d)(2)].
- There was no immediate access to an emergency communications system at the short term hazardous waste storage area [Section 7-309(a)(1)(B) and 7-309(a)(3)(A)].
- In the manufacturing cells, the satellite accumulation drums for water soluble coolant skimmings were not labeled as required by VHWMR Section 7-310(a)(5) or as allowed under the exemption created by VHWMR Section 7-203(l)

The following areas of concern were also noted:

- Aisle space in the short term hazardous waste storage area was a little less than 24" in places [Section 7-311(b)(3)].
- Although documentation existed for Hazard Communication Program Tier II reporting to local authorities, there was no similar documentation for updates of emergency procedures or emergency contact lists [Section 7-309(a)(4)(A)].
- Satellite accumulation drums for oil and water soluble coolant skimmings were not properly labeled as required by Section 7-310(a)(5). However, the requirement for labeling these drums is complicated by Section 7-203(l).

I said that I need to check with my supervisor, but that I would expect this inspection to result in a Notice of Alleged Violation (NOAV). I also told him that penalties or fines are not typically associated with this level of enforcement. I thanked CB for his time and assistance and said that the facility could expect to hear from the WMD in writing in about 6 to 8 weeks. I also said that the facility typically has one month to respond to the NOAV, and that the WMD may do a follow-up inspection after that time.

*Note: On July 10, 2002, Charles Brendese sent an e-mail indicating responses by U.S. Tsubaki to observations made during the June 26, 2002, facility visit (Attachment 7).*

IX. ATTACHMENTS TO INSPECTION REPORT:

1. Vermont Hazardous Materials Management Division. Closing Conference Log, U.S. Tsubaki, Inc. (S-02-02-066) Date: June 26, 2002.
2. Waste Management Division Multi-Media Inspection Cover Page and DEC Multimedia Checklist. Facility Name: U.S. Tsubaki, Inc. Inspector: John Miller  
Date: June 26, 2002.
3. Charles Brendese, Facility Manager. 2002. Vermont Notification of Regulated Waste Activity. Name of Installation: U.S. Tsubaki, Inc. (Date: June 26, 2002).
4. U.S. Tsubaki, Inc. 2002. Transmittal letters for Hazard Communication Program Tier II reports dated February 25, 2002.
5. Vermont Waste Management Division. 2002. "Manifest Info For Wastes Shipped 01/01/1999 - 15/06/2002"[sic]. Site Name: U.S. Tsubaki, Inc. Date: June 19, 2002.  
3 pages.
6. Vermont Waste Management Division. Hazardous Waste Inspection Checklist - Generators. Facility Name: U.S. Tsubaki, Inc. Inspector: John Miller  
Date: June 26, 2002.
7. Charles Brendese, Facility Manager, U.S. Tsubaki. 2002. E-mail dated July 10, 2002, indicating responses to observations made during June 26, 2002 facility visit.

RCRA INSPECTION REPORT

I. GENERAL INFORMATION:

File: G-02-02-007

Company: U.S. Tsubaki, Inc.

Address: 119 Bowen Road, Bennington 05201

Telephone: (802) 447-7561

Company Official(s) Interviewed: Timothy Berry (TB), Project Engineer

EPA/State Official(s)  
Conducting the Inspection: Sherri Kasten, Haz Mat Management Division <sup>SMK 10/24/94</sup>

Type of Inspection: Follow-up

Date of Inspection: August 31, 1994

Last Inspection Date: November 24, 1993

II. RCRA REPORTING/INFORMATION REQUIREMENTS:

Facility EPA ID Number: VTD 082 275 959

Type of Operation: Sprocket manufacturer

Notification Date: April 14, 1986

Source Classification: Generator (100-1,000 Kg/month)

III. INSPECTION SCHEDULE:

I arrived and signed in at the front desk at ~ 1445 hours; TB met me there and escorted me to his office. I explained that I was performing a follow-up inspection to determine the compliance status of the facility in regard to the February 22, 1994, Letter of Warning. We discussed hazardous waste generation activities. TB told me that U.S. Tsubaki is planning to re-process waste tramp oil on-site as of 9/94 (temperature-controlled filtration, with additives); he said that the amount of waste oil generated is expected to drop to  $\pm 375$  gallons/year as compared with the current ~ 1,285 gallons/year.

TB then completed a Notification of Regulated Waste Activity form to update EPA's files regarding the correct facility name (U.S. Tsubaki, Inc., not U.S.T. Inc) (Attachment 1). I also gave TB a copy of the May 1994 Vermont Hazardous Waste Generator Handbook, for his information.

We then proceeded to the hazardous waste short-term storage area; wastes had been last shipped on August 19, 1994, and no hazardous wastes were in storage at the time of this follow-up visit. The inspection was concluded and I left the facility at ~ 1515 hours.

#### IV. GENERAL OBSERVATIONS:

This section identifies the violations noted during the last inspection and the conditions observed during the follow-up inspection:

- Section 7-308(4): Two drums located in the short-term storage area, containing paint booth sludge and waste oil, were not marked with the date when the container was first used to accumulate hazardous waste.

Condition(s) Noted: There were no containers of hazardous waste in storage at the time of the follow-up inspection.

- Section 7-309(5)(c)(i): A funnel inserted in a drum used for waste oil collection across from the short-term storage and two drums located behind the short-term storage area used to collect waste coolant were not covered.

Condition(s) Noted: The only satellite accumulation container observed to be in use at the time of the follow-up inspection, a waste oil drum, had a covered funnel in the bung hole.


#### V. CLOSING CONFERENCE:

I told TB that U.S. Tsubaki had satisfactorily responded to all the conditions in the LOW dated February 22, 1994. I thanked him for his time and assistance and said that the facility could expect to hear from the HMMD in writing within ~6-8 weeks. TB asked that I send the written response to Ray Prouty, V.P. of Sprocket Division, and that I send TB a copy of the letter. I said that I will do that.

#### VII. ATTACHMENTS TO INSPECTION REPORT:

- 1. Berry, Timothy (Project Engineer). 1994. EPA Notification of Regulated Waste Activity. Name of Installation: U.S. Tsubaki, Inc. August 31.

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

 **EPA**

**Notification of Regulated Waste Activity**  
United States Environmental Protection Agency

Date Received  
(For Official Use Only)

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification

☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number  
VT0082275959

II. Name of Installation (Include company and specific site name)

U. S. TSUBAKI INC.

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street  
119 BOWEN RD

Street (continued)

City or Town  
BENNINGTON

State  
VT

ZIP Code  
05201-

County Code  
00

County Name  
BENNINGTON

IV. Installation Mailing Address (See instructions)

Street or P.O. Box  
SAME

City or Town

State

ZIP Code

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last)  
BERRY

Name (first)  
TIMOTHY

Job Title  
PROJECT ENGR.

Phone Number (area code and number)  
802-447-7561

VI. Installation Contact Address (See instructions)

A. Contact Address Location Mailing  
☒

B. Street or P.O. Box

City or Town

State

ZIP Code

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner  
U S TSUBAKI INC.

Street, P.O. Box, or Route Number  
301 E. MARQUARDT DR.

City or Town  
WHEELING

State  
IL

ZIP Code  
60090-

Phone Number (area code and number)  
708-959-9500

B. Land Type  
PAGE 11  
P

C. Owner Type  
PAGE 11  
P

D. Change of Owner Indicator  
Yes ☐ No ☒

(Date Changed)  
Month Day Year

PLEASE RETURN FORM TO:  
VT ANR/DEC  
HAZARDOUS MATERIALS MANAGEMENT DIV.  
103 SOUTH MAIN STREET, WEST BLDG  
WATERBURY, VERMONT 05671-0404

Approved: OMB No. 2050-0028, Expires 9-30-92  
GSA No. 0246-EPA-C-7

ID - For Official Use Only

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity-- SEE PAGES 11 & 12		B. Used Oil Fuel Activities
<p>1. Generator (See instructions)</p> <p><input type="checkbox"/> a. Greater than 1000kg/mo (2,200 lbs.)</p> <p><input checked="" type="checkbox"/> b. 100 to 1000 kg/mo (220 - 2,200 lbs.)</p> <p><input type="checkbox"/> c. Less than 100 kg/mo (220 lbs.)</p> <p>2. Transporter (Indicate Mode in boxes 1-5 below)</p> <p><input type="checkbox"/> a. For own waste only</p> <p><input type="checkbox"/> b. For commercial purposes</p> <p>Mode of Transportation</p> <p><input type="checkbox"/> 1. Air</p> <p><input type="checkbox"/> 2. Rail</p> <p><input type="checkbox"/> 3. Highway</p> <p><input type="checkbox"/> 4. Water</p> <p><input type="checkbox"/> 5. Other - specify _____</p>		<p>SEE PAGE 12</p> <p>1. Off-Specification Used Oil Fuel</p> <p><input type="checkbox"/> a. Generator Marketing to Burner</p> <p><input type="checkbox"/> b. Other Marketer</p> <p><input type="checkbox"/> c. Burner - Indicate device(s) - Type of Combustion Device</p> <p><input type="checkbox"/> 1. Utility Boiler</p> <p><input type="checkbox"/> 2. Industrial Boiler</p> <p><input type="checkbox"/> 3. Industrial Furnace</p> <p><input type="checkbox"/> 2. Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification</p>
<p>3. Treater, Storer, Disposer (at installation) Note: A permit is required for this activity; see instructions.</p> <p>4. Hazardous Waste Fuel</p> <p><input type="checkbox"/> a. Generator Marketing to Burner</p> <p><input type="checkbox"/> b. Other Marketers</p> <p><input type="checkbox"/> c. Boiler and/or Industrial Furnace</p> <p><input type="checkbox"/> 1. Smelter Referral</p> <p><input type="checkbox"/> 2. Small Quantity Exemption</p> <p>Indicate Type of Combustion Device(s)</p> <p><input type="checkbox"/> 1. Utility Boiler</p> <p><input type="checkbox"/> 2. Industrial Boiler</p> <p><input type="checkbox"/> 3. Industrial Furnace</p> <p><input type="checkbox"/> 5. Underground Injection Control</p>		

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. (See 40 CFR Parts 261.20 - 261.24)

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (D000)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(List specific EPA hazardous waste number(s) for the Toxicity characteristic contaminant(s))

0018 0039

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33. See instructions if you need to list more than 12 waste codes.)

1	2	3	4	5	6
F001	F005				
7	8	9	10	11	12

C. Other Wastes. (State or other wastes requiring a handler to have an I.D. number. See instructions.)

1	2	3	4	5	6
V702	V705				

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature <i>Timothy L. Brady</i>	Name and Official Title (type or print) TIMOTHY L. BRADY PROJECT MANAGER	Date Signed 8-31-94
--------------------------------------	---	------------------------

XI. Comments



MAR 9 1994

March 7, 1994

Hazardous Waste Management Division  
Mr. Peter W. Marshall  
103 S. Main Street  
Waterbury, VT 05671-0404

RE: Written Certification to Letter of Warning

Dear Mr. Marshall,

In response to the letter of warning dated February 22, 1994, as required, U.S. Tsubaki, Inc. has modified its Hazardous Waste Management Program to insure that we stay in compliance with state and Federal regulations.

In the future, we will insure that hazardous waste collection drums will be properly marked with the required accumulation start date and pertinent information. In the past, this date was registered in our hazardous waste log.

With regards to the open drum having a funnel inserted; being a major machining operation we are continuously collecting oil from coolant skimmers and machine catch pans to avoid spills. To insure that we stay in compliance with Section 7-309(5)(c)(i), we have purchased a poly safety funnel with cover. The other two barrels noted are used in our oil/coolant recycling program for in-house use which was not deemed hazardous waste. In the future, any open container not being processed will be covered and secured.

I sincerely hope that these modifications will meet with your approval in complying with our state and Federal regulations. If you have any questions or suggestions pertaining to this matter, please contact me at your earliest convenience.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Tim Berry'.

Timothy L. Berry  
Project Engineer

TB/pg



# State of Vermont

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
Natural Resources Conservation Council  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

## AGENCY OF NATURAL RESOURCES Department of Environmental Conservation

Hazardous Materials Management Division  
103 South Main Street/West Building  
Waterbury, Vermont 05671-0404  
(802) 241-3888  
FAX: (802) 244-5141

February 22, 1994

Mr. Tim Berry  
U.S. Tsubaki Inc.  
Bowen Road  
Bennington, Vermont 05201

### CERTIFIED MAIL

RE: Letter of Warning

Dear Mr. Berry:

On November 24, 1993, a representative of the Vermont Agency of Natural Resources, Hazardous Materials Management Division (HMMD), conducted a compliance evaluation inspection at U.S. Tsubaki in Bennington, Vermont, EPA ID# VTD 082 275 959. You are hereby put on notice that the Agency of Natural Resources believes that U. S. Tsubaki Inc. was in violation of the following Vermont Hazardous Waste Management Regulation (VHWMR):

-Section 7-308(4): Containers, packages, and tanks used for the storage of hazardous wastes shall be clearly marked at the time they are first used to accumulate or store waste. Such marking shall include: the generator's name, address, and EPA identification number; the name of the hazardous waste stored therein; the date when the container or tank was first used to accumulate or store hazardous waste and the following language, "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."

**VIOLATION:** Two drums, located in the short-term storage area, #'s 41-93 and 43-93 containing paint booth sludge and waste oil respectively were not marked with the date when the container was first used to accumulate hazardous waste.



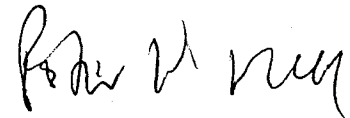
U.S. Tsubaki Inc. (G-02-02-007)  
Letter of Warning  
February 22, 1994  
Page 2

In addition to the above, the inspector observed that a funnel inserted in a drum used for waste oil collection across from the short-term storage and two drums located behind the short-term storage area used to collect waste coolant were not covered. All containers holding hazardous waste must remain covered when they are not in use as required in Section 7-309(5)(c)(i).

Please provide written certification by March 22, 1994, verifying that the necessary modifications have been made to your hazardous waste management program. A follow-up inspection may be conducted shortly after this date.

While I remain confident that this matter can be resolved voluntarily, continuing violations may result in further enforcement action, including the imposition of monetary penalties. If you have any questions concerning this Letter of Warning, please feel free to contact me at 241-3888.

Sincerely,



Peter W. Marshall  
Chief, Management and Prevention Section

file: d:/wp50/users/wastemgt/garyu/wp/ust.low

RCRA INSPECTION REPORT

**I. GENERAL INFORMATION:**

File: G-02-02-007

Company: U.S. Tsubaki Inc. (UST)

Address: Bowen Road  
Bennington, Vermont 05201

Telephone: (802) 447-7561

Company Official(s) Interviewed: Ray Prouty Jr. (RP), Vice President/General Manager  
Tim Berry (TB), Project Engineer  
Roger Livingston (RL), Building Maintenance  
Raylanda France (RF), Personnel Administrator

EPA/State Official(s)  
Conducting the Inspection: Gary R. Urich (GRU), Hazardous Materials Management Division (HMMD)

Type of Inspection: Compliance Evaluation Inspection

Date of Inspection: November 24, 1993

Last Inspection Date: October 23, 1991

**II. RCRA REPORTING/INFORMATION REQUIREMENTS:**

Facility EPA ID Number: VTD 082 275 959

Type of Operation: Sprocket manufacturer

Notification Date: April 14, 1986

Source Classification: Generator (100-1000 Kg/month)

**III. INSPECTION SCHEDULE:**

I arrived and signed in at the front desk at ~0845 hours. RP met me there and escorted me to his office. I explained that I was on-site to conduct an inspection to evaluate compliance with Vermont's Hazardous Waste Management Regulations (VHWMR). The inspection

included an introductory conference with RP, a walk-through of the manufacturing and storage areas with RL, a review of facility records associated with the hazardous waste program, and a brief concluding conference with RP (Attachment 1). I left the facility at ~ 1000 hours.

#### IV. SOURCE DESCRIPTION:

UST was established in Bennington in April of 1977; approximately 125 employees work three shifts/day, five days/week. The facility manufactures sprockets for Tsubaki Chains, Inc. The corporate headquarters are located in Wheeling, Illinois.

Manufacturing begins with the rough cutting of sheet and bar stock. Raw materials are either cut with a plasma cutter, screw machines or lathes. Once cut to size, a hole is cut prior to subsequent milling (hobbing).

Parts are milled to create sprockets which are deburred with abrasive belts and wire brushes. Some parts are drilled, tapped and welded to meet specific customer requirements.

Once a part meets milling specifications, it receives a finish to prevent oxidation during storage. Finishes are either spray applied in a combination automated detergent based degreasing/spray booth operation or applied using a black oxide coating process.

Waste streams at UST include;

Waste oil (VT02):

- from the separation of oils from oil/water soluble coolants which is now almost entirely phased out and replaced with a synthetic coolant.
- from metal scraps centrifuged and which are generated during milling.
- from machinery drip pans and hydraulic machine oils from maintenance.
- from coolant evaporator units and synthetic coolant reclamation unit.
- adsorbent materials (speedi-dri, pigs) used in controlling oil spills in the manufacturing area.

Spray booth sludge and paint related materials (F005, D018):

- generated from the skimming of paint from the spray booth exhaust wash system and from cleaning of the spraybooth equipment.

Parts degreaser (D001);

- from one stationary 15 gallon Safety-Kleen parts washing unit and one 8 gallon mobile Safety-Kleen parts washing unit used for milling machine service on the production floor.

Grinding sludge (VT05);

- generated from the tool room hobb and surface grinder, which total approximately 100 to 150 gallons per year.

In the areas of Pollution Prevention, UST is currently researching the possibility of reusing their used oil on site. Oil used at the end of the black oxide process is under consideration for reuse within the same black oxide process. UST has also established a total quality management team to address hazardous waste issues. Shop rags are laundered through Aladco and exempt according to Agency policy.

#### V. GENERAL OBSERVATIONS:

Upon my arrival I met with RP and informed him of the purpose of my visit; to conduct a routine compliance evaluation inspection. RP informed me that TB was out on vacation and that he would do his best to assist me in my inspection. RP introduced me to RL who conducted the tour through the facility.

RL began the tour in the Machine Maintenance shop. One Safety-Kleen parts washing unit was present and RL stated the unit is serviced ~ every six weeks and generates ~ 15 gallons of waste degreaser (D001). The mobile unit used in machine maintenance was not observed during this inspection.

We arrived at the designated short-term storage area at ~0900 hours. "Danger Hazardous Waste..." and "No Smoking" signs were posted. A telephone and alarm system were nearby and a fire extinguisher and spill clean-up equipment were available. Aisle space was adequate. Four drums were in storage, two drums were missing accumulation dates, although one drum #41-93 indicated an accumulation date on UST's Hazardous Waste Log (Attachment 2).

Refer to section VIII of this report for specific details regarding waste containers observed, either accumulating or in storage, during the facility walk-through.

A labeled satellite accumulation drum across from the short-term storage area was accumulating waste oil. A funnel used in collection was inserted in the drum and was not covered. Located behind the short-term storage area are two coolant evaporation units. Two open top drums are used to collect waste coolant. It remains in the drums long enough to allow coolant and oil phases to separate prior to introducing waste coolant phase to the 1000 gallon holding tank. Oil and coolant is further separated in the holding tank prior to introduction of the coolant into the evaporator. Separated oils from the drums and holding tanks are placed into a satellite accumulation drum next to the evaporation unit. This drum was not labeled and the bung was observed open. RL stated filters on the evaporation units

are changed ~ every two months and are handled as hazardous waste.

On the tour through the milling areas, one satellite accumulation drum was observed near machine #115. This labeled drum was accumulating waste sorbent and was covered with a large mesh screen to filter debris (paper, metal) from the sorbent used to collect oil spills from the production floor. Three satellite accumulation drums were observed in the Hobbing department. Two drums were collecting oil and one was collecting used sorbent. All drums were labeled and covered. One drum of waste oil had just been filled as stated by RL.

At the Finishing department, one satellite accumulation drum was observed covered and labeled near the paint booth. Waste paint and thinners and paint booth sludge from the water wall filtration component of the spray booth are collected in this drum

RL stated that no wastes are generated from the black oxide process. Parts which receive a black oxide finish are coated with oil, by dipping the part in an oil bath at the end of the coating process. An oil pan used to collect carry-over is periodically sucked out and the waste oil is put with other waste oils for disposal.

After the conclusion of the facility tour at ~0930 hours I met with RF who provided me with training documentation and manifesting information for my review.

## VI. DOCUMENT REVIEW:

- A. Training Plan: The training plan was reviewed and meets Section 7-309(4) requirements.
- B. Training Records: Training records and documents were current and are kept on file as required.
- C. Contingency Plan: The contingency plan was reviewed during the inspection. The plan addressed the requirements of Section 7-309(3).
- D. Manifests: Prior to the inspection, a list of manifests generated by the facility since 10/30/92 was prepared; this list was then used at the time of the inspection as a reference for evaluating the manifests on file (Attachment 3). All manifests reviewed were available and complete.
- E. Inspection Logs: Daily inspection logs were being maintained by RL. All requirements of Section 7-309(1) were addressed.

- F. Inventory Logs: The inventory was accurate at the time of inspection (Attachment 2).
- G. Land Disposal  
Restriction (LDR)  
Notifications: Copies of the LDR notifications, when required, were available for each manifest reviewed.
- H. Annual Reports A copy of the facility's annual reports are kept on file in TB's office for three years.

## VII. CLOSING CONFERENCE:

I told RP that I observed the following:

- storage of waste oil (VT02) destined for the Safety-Kleen facility kept outside the 180 day storage area may be improper
- covers should be kept on funnels used in satellite accumulation drums and that covers may be a good management practice on drums used to collect used coolant prior to processing through evaporation units
- accumulation dates were missing on two drums in short-term storage
- I would follow-up any manifest and annual report queries I had with TB when he returned from vacation

I said that I need to check with my supervisor, but that I would expect this inspection to result in either a Letter of Warning (LOW) or Notice of Alleged Violation (NOAV). I also told them that penalties or fines are not typically associated with either level of enforcement. I thanked RP for his time and assistance and said that the facility could expect to hear from the HMMD in writing in ~6-8 weeks. I also said that the facility typically has one month to respond to the NOAV, and that the HMMD may do a follow-up inspection after that time.

#### VIII. WASTES IN STORAGE:

The following wastes were observed to be accumulating at the facility:

No. of 55-gallon Drums	Type of Waste	EPA Code	Marked and Labeled	Remarks
1	waste oil	no	no	near evaporator
1	waste oil & absorbent	n/a	yes	near machine #115
2	waste oil	n/a	yes	Hobbing Dept.
1	absorbent	n/a	yes	Hobbing Dept.

The following drums were observed inside the short-term storage area during the inspection:

No. of 55-gallon Drums	Type of Waste	EPA Code	Date of Accumulation	Marked and Labeled	Remarks
1	paint booth sludge	F001, F005	no	yes	drum #41-93
1	waste oil & absorbent	VT02	no	yes	drum #43-93
1	paint booth sludge	F001, F005	10/12/93	yes	drum #44-93
1	paint booth sludge	F001, F005	10/22/93	yes	drum #45-93

#### IX. ATTACHMENTS TO INSPECTION REPORT:

1. Vermont Hazardous Materials Management Division. 1993. Audio-tape Log, U.S. Tsubaki (G-02-02-0087). Tape # N/A. 11/25/93.

2. Hazardous Waste Log. U.S. Tsubaki Inc. 11/19/93
3. Vermont Hazardous Materials Management Division. 1993. Manifested Generator Shipments "10/30/91 Through 11/19/93." Site Name: U.S.T. 11/19/93. 3 pages.




## RCRA INSPECTION REPORT

### I. GENERAL INFORMATION

Facility Name - File: G-02-02-007  
Company: U.S.T., Inc.  
Address: Bowen Road  
Bennington, VT 05201  
Telephone: (802) 447-7561

Company Officials Interviewed:  
Tim Berry, Project Manager

EPA/State Officials Conducting the Inspection:  
Stephen W. Simoes, VT ANR

Type of Inspection: Initial 

Date of Inspection: October 23, 1991

Last Inspection Date: February 26, 1991

### II. RCRA REPORTING/INFORMATION REQUIREMENTS

Facility EPA Identification Number: VTD082275959  
Type of Operation: Sprocket Manufacturer  
Notification Date: April 14, 1986  
Source Classification: Generator (100-1000 kg/mo)

### III. FACILITY DESCRIPTION

U.S.T., Inc., also known as U.S. Tsubaki, manufactures sprockets for Tsubaki Chains, Inc. The Bennington plant has been in operation since 1977 and currently employs 160 people on two shifts. The corporate headquarters are located in Wheeling, Illinois.

The manufacturing process is initiated by rough cutting sheet stock to size and barstock to length. The sheet stock is cut with a torch and the barstock is cut with both screw machines and lathes. The screw machines are multi-spindle milling machines that are capable of cutting up to eight bars (12' to 14' in length) simultaneously. A lathe can only mill one bar at a time.

After parts are cut to size, a hole is cut using either reamers for the barstock or punch presses for the sheet stock.

Next, in a complex milling operation referred to as hobbing, teeth are generated creating sprockets which are then deburred using a variety of abrasive belts and wire brushes. Some parts also have drilling, tapping, and welding operations performed upon them to meet the specific requirements of a customer.

Once the parts meets specification, it goes to the finish department where it is degreased with an aqueous solution of Oakite Cryscoat 747 LTS. This product contains percent levels of phosphoric acid and hydrofluoric acid and is diluted one part product to 23 parts water for use. This degreasing agent, which is sprayed on the part, is continually cycled from a vat located below automated spray guns. Any residual degreaser is removed by blow drying the part. After degreasing, the sprockets are painted in spraybooths.

The paint spraybooth utilizes a filtration system that forces the airstream passing out the back of the booth to come in contact with water bath. This removes any particulates from the air before it passes to the outside environment.

The waste generated at U.S.T., Inc. include:

1. Speedi-dri and oil (VT02) generated by machine maintenance and leaks.
2. Waste oils (VT02) generated by machine maintenance, leaks, and by the water soluble oil reclamation system (described later in this report).
3. Paint booth sludge (F003/F005) generated by dredging the waterbath in the back of the spraybooth and by overspray that is swept out of the spraybooth. At the time of the inspection, material dredged from the degreasing vat was also added to the paint sludge.

U.S.T., Inc. recycles a large percentage of the waste water soluble oils that are used in the manufacturing process. First, metal chips and turnings are collected, drained and spun dry. The liquid collected from draining and spinning the scrap metal, is combined with liquids that accumulate in collection trays beneath each milling machine in the plant. These trays contain a mix of water soluble cutting oil and hydraulic oil that inevitably leaks from the machines. The combined liquids are centrifuged to separate the water soluble oil from the more dense hydraulic oil/water sludge that is generated. The water soluble oil is reusable at this point. The hydraulic oil/water sludge is placed in an evaporator to remove the water. The resulting hydraulic oil sludge is disposed of as hazardous waste (VT02).

The metal used at U.S.T., Inc. is primarily a low chromium steel. All the drained metal chips and turning are recycled as scrap metal.

IV. GENERAL OBSERVATIONS:

Upon arrival at U.S.T., Inc., I met with Mr. Tim Berry, a project manager and the person responsible for hazardous waste management at U.S.T., Inc. I explained that the purpose of my visit was to conduct an inspection for compliance with Vermont's Hazardous Waste Management Regulations (HWMR).

We started by walking through the plant, beginning at the hazardous waste storage area which had the required signs posted, a communication device, spill clean-up material and a fire extinguisher available. The aisle space between the eight drums being stored at the time of the inspection was adequate for inspection purposes. All of the drums were properly labeled and were closed at the time of the inspection. Also in the storage area, were two drums that were accumulating waste. One drum was accumulating waste oil and the other Speedi-dri and oil.

From the storage area, we walked through the entire manufacturing portion of the facility. As stated by Mr. Berry, there are no satellite accumulation drums except for those in the hazardous waste storage area.

From the plant floor we went outside to investigate a citizen complaint alleging that U.S.T., Inc. was disposing of hazardous waste in outdoors storm drains (RCRA 91-23). After walking the grounds and inspecting the two storm drains located at the south end of the facility, I was not able to find any indication of improper disposal of hazardous waste.

Next, we went to Tim Berry's office to review the documents associated with the hazardous waste management program.

V. DOCUMENT REVIEW:

A. Training Plan: A revised training plan (dated 8/91) was submitted to this office in response to an Agency letter (5/7/91) that had commented on an earlier submittal.

This revised training plan meets the requirements of Section 7-309(4) of the HWMR.

B. Training Documents: The documents associated with U.S.T., Inc.'s employee training program are now maintained in Tim Berry's office.

These documents include records of employee training<sup>and</sup> a listing of job titles and job descriptions for positions with hazardous waste management duties.

These documents were all available at the time of the inspection and were found to meet the requirements of Section 7-309(4)(f) of the HWMR.

- C. Contingency Plan: A revised contingency plan (dated 8/91) was submitted to this office in response to an Agency letter (5/7/91) that had commented on an earlier submittal.

This revised contingency plan meets the requirements of Section 7-309(3) of the HWMR.

- D. Manifests: The manifests are maintained by Tim Berry and were reviewed at the time of the inspection. At that time, the 1991 manifests were compared to a printout which had been prepared prior to the inspection. All of the manifests were found to be complete and accurate.

- E. Inspection Log: The inspection log is maintained by Tim Berry. It was found to be up to date and contained the required elements.

- F. Inventory Log: The inventory log is maintained by Tim Berry and, at the time of the inspection, it accurately reflected the hazardous wastes being stored in U.S.T., Inc.'s storage area.

- G. Land Disposal Restrictions (LDR): Copies of the LDR notification forms that had accompanied each of the manifested shipments of LDR wastes were found to be complete and accurate.

VI. DRUM INVENTORY

# of 55 Gallon Containers	Waste Type	EPA Code	Accum. Date	Marked and Labeled	Remarks
1	oil contaminated sorber	VT02	10/16/91	Yes	
1	oil contaminated sorber	VT02	accumulating	Yes	
1	waste oil	VT02	accumulating	Yes	
1	waste oil	VT02	10/02/91	Yes	
1	waste oil	VT02	10/03/91	Yes	
1	waste oil	VT02	10/04/91	Yes	
1	waste oil	VT02	10/15/91	Yes	
1	waste oil	VT02	10/16/91	Yes	
1	paint sludge	F003/F005	accumulating	Yes	
1	paint sludge	F003/F005	10/07/91	Yes	

SWS:dls1269

TRIP REPORT

U.S.T. Incorporated  
Bowen Road  
P.O. Box 1200  
Bennington, VT 05201  
(802) 447-7561

PARTICIPANTS: Carl Anderson, Engineering Mgr.  
John Connell, General Foreman  
Ken Rota, VT AEC

DATE OF INSPECTION: April 10, 1986

LAST INSPECTION February 10, 1986

PURPOSE OF INSPECTION: Follow-up

EPA ID #: None

SOURCE CLASSIFICATION: <100 kg/month

---

OBSERVATIONS:

All violations cited in the March 10, 1986 letter of deficiency have been corrected. No further action is necessary.

ADDITIONAL COMMENTS:

During the followup inspection, the following items were noted:

1. A mineral spirits degreasing tank was used. At this time the tank has not been cleaned out and is only added to.
2. Trichloroethylene is used to degrease cabinets and other such items. The TCE is applied with a sprayer and wiped with a rag.
3. An electric furnace should be included as part of the process description. No heat treat salts are used.

\kbr

February 14, 1986

REF: MEMO #1

Memo to File:

Subject: Hazardous Waste

UST Bennington plant has (4) barrels of waste which consist of the following materials:

1. Rust Preventative - Du Bois #1 RP-5AFT
2. Chem Clean #184 - Chemical Ways Corp.
3. Paint - Enamel 90% with Mineral Spirits 10%
4. Paint - Lacquer 50% and Lacquer Thinner 50%

The writer telephoned the Vermont Dept. of Water Resources & Environmental Engineering on 2/3/86 and spoke with Mr. Ken Rota. It was determined that UST required a Generator's U.S. EPA ID number. Mr. Rota provided a temporary number VTP 000001241 to cover this current requirement. He informed the writer he would be making a visit to UST to review the manufacturing processes and the type of wastes generated.

Messrs. Ken Rota and Peter Reed visited UST Bennington on 2/10/86. Messrs. Rota, Reed and the writer toured the plant. The (4) barrels of waste were viewed and the contents discussed. It was agreed that disposal thru the CECOS Treatment Corp. would be an adequate means of handling the disposal.

The barrels of Trim Sol concentrate and the used Trim Sol solution (waiting processing) were viewed. Mr. Rota stated that water soluble coolants ref. Trim Sol are not considered as hazardous waste.

The UST oil storage area was visited and the writer was asked as to the types of oil products used. Mr. Rota noted that these products would be considered as hazardous waste when and if they are disposed. The writer indicated that these products are normally used up in application.

Sheet 1 of 2

C. E. A.





TABLE B-6  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
Jard Company Site

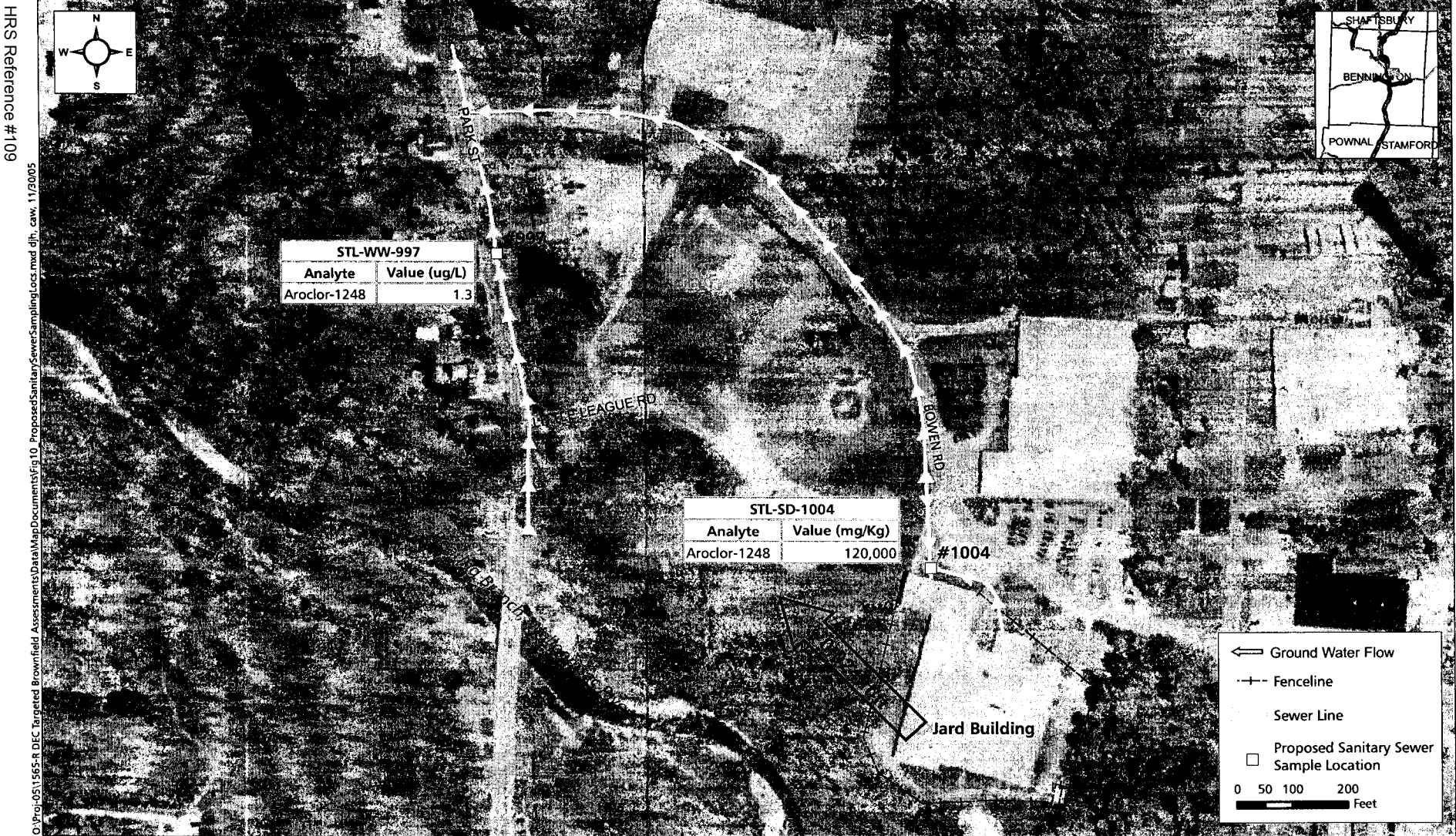
Sample ID:																						
Analyte	Analytical Method	VGES	Units	GW-EPA2	GW-EPA3	GW-EPA3-FD	GW-EPA4	GW-EPA5	GW-EPA6	GW-EPA7	GW-EPA8	GW-EPA9	GW-EPA9-FD	GW-EPA10	GW-MW1	GW-MW-2	GW-MW-3	GW-MW-WE-4	GW-MW-6	GW-Supply Well	GW-R1-001	GW-R1-002
Field Parameters																						
Dissolved Oxygen	SEI SOP 6.34.0		mg/L	0.57	3.28	3.28	4.24	6.59	5.97	3.96	2.64	1.99	1.99	0.121	4.74	3.54	0.81	3.22	0.172	1.59	NA	NA
Specific Conductivity	SEI SOP 6.34.0		uS/cm	63.88	70.2	70.2	74.61	63.04	62.93	62.43	69.18	58.99	58.99	68.49	70.45	61.88	733	68.57	93.13	92.36	NA	NA
pH	SEI SOP 6.34.0		pH units	5.91	6.41	6.41	6.18	6.24	6.23	6.3	6.14	6.36	6.36	6.27	6.38	6.24	6.55	6.04	6.2	6.36	NA	NA
Oxidation Reduction Potential	SEI SOP 6.34.0		mV	17	22	22	39	123	113	217	65	-5	-5	-36	24	16	-125	51	-151	31	NA	NA
PCB's																						
Aroclor-1016	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
Aroclor-1221	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
Aroclor-1232	8082	0.5	ug/L	2.2	0.57 U	0.61 U	0.56 U	0.53	0.53 U	0.7	0.54 U	0.56 U	0.53 U	21	0.56 U	0.56 U	13,000	0.54 U	31	0.56 U	0.56 U	0.56 U
Aroclor-1242	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
Aroclor-1248	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
Aroclor-1254	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
Aroclor-1260	8082	0.5	ug/L	0.56 U	0.57 U	0.61 U	0.56 U	0.51 U	0.53 U	0.53 U	0.54 U	0.56 U	0.53 U	2.6 U	0.56 U	0.56 U	1200 U	0.54 U	2.7 U	0.56 U	0.56 U	0.56 U
VOC's																						
1,1-Dichloroethane	8260	70	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3	2 U	2 U	87	2 U	3	2 U	2 U	2 U
cis-1,2-Dichloroethene	8260	70	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
trans-1,2-Dichloroethene	8260	100	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	8260	600	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4	2 U	2 U	2 U	2 U	2 U
1,3-Dichlorobenzene	8260	600	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	9	2 U	2 U	2 U	2 U	2 U
1,4-Dichlorobenzene	8260	75	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3	2 U	2 U	70	2 U	7	2 U	2 U	2 U
Benzene	8260	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	8260	100	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	8260	70	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	8260	700	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4	2 U	2 U	2 U	2 U	2 U
Toluene	8260	1,000	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4	2 U	2 U	2 U	2 U	2 U
1,1,1 Trichloroethane	8260	200	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene	8260	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	34	2 U	2 U	2 U	2 U	2 U
Vinyl Chloride	8260	2	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U
Xylenes (Total)	8260	10,000	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U
SVOC's																						
bis-2-(ethylhexyl)phthalate	8270C	6	ug/L	12 U	12 U	11 U	2.1 J	13 U	3.6 J	30 U	11 U	11 U	11 U	2.9 J	11 U	11 U	45,000	11 U	2.8 J	11 U	11 U	11 U
Di-nbutylphthalate	8270C		ug/L	12 U	12 U	11 U	10 U	13 U	10 U	30 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Fluorene	8270C	280	ug/L	12 U	12 U	11 U	10 U	13 U	10 U	30 U	11 U	11 U	11 U	11 U	11 U	11 U	29	11 U	2.4 J	11 U	11 U	11 U
1,2,4 Trichlorobenzene	8270C	70	ug/L	12 U	12 U	11 U	10 U	13 U	10 U	30 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Metals																						
Zinc, Total	6010	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	20 U	20 U	20 U	NA	NA	NA	NA	20 U	NA	NA	NA

Notes:

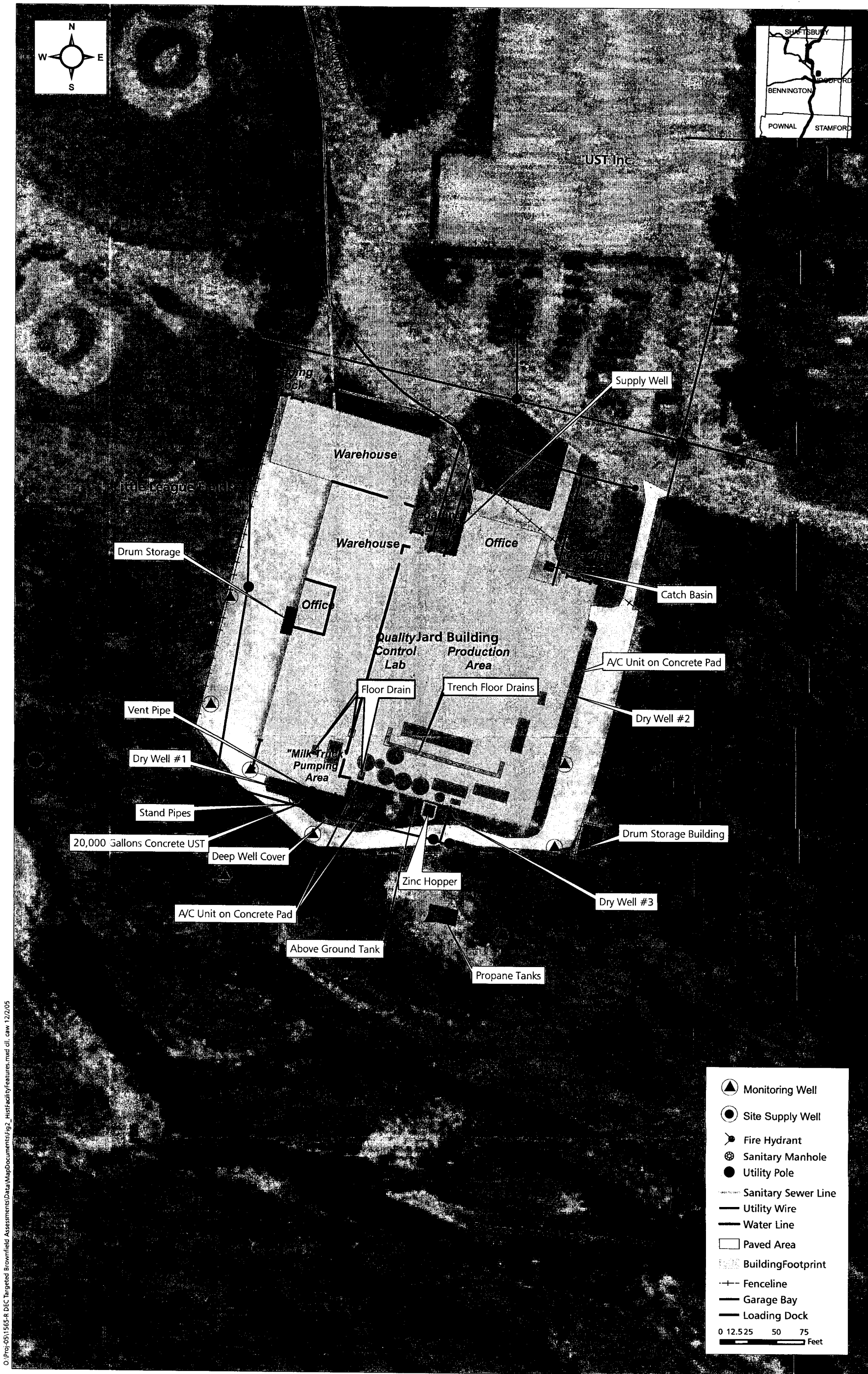
PCB's = Polychlorinatedbiphenyls  
VOCs = Volatile Organic Compounds  
SVOCs = Semi-Volatile Organic Compounds

Field parameters analyzed using an Insitu Troll 9000 multi-parameter meter.  
Specific laboratories conducting SW 846 analyses of groundwater samples is as follows: Field Parameters: Stone field staff; 8082 and 8270: STL Burlington; 8260: Stone Onsite Laboratory; 6010: Endyne Laboratory  
NA = Not Analyzed  
U = Compound was not detected at or above the reported limit.  
J = Estimated Value.

PRG = Preliminary Remediation Goal  
Shaded values exceed Preliminary Remediantion Goal.



**Figure C-10: Sampling Locations for the Town of Bennington Municipal Sanitary Sewer Targeted Brownfields Assessment, Former JARD Company Site**  
Town of Bennington, Vermont  
Sources: Orthophotography, NRCS, 1992-1995; Fenceline, Wehran, 1989-1990; Proposed Sample Locations, Stone, 2005.



O:\Proj-051565-R D&C Targeted Brownfield Assessments\Data\MapDocuments\fig\_2\_HistFacilityFeatures.mxd.dwg 12/2/05

**Figure C-2: Site Map**  
**Targeted Brownfields Assessment, Former JARD Company Site**  
**Town of Bennington, Vermont**  
Sources: Orthophotography, NRCS, 1992-1995; Exterior Structures & Utilities, Wehran, 1989-1990;  
Interior Structures, Weston, 1994.





**Figure C-8: Potentiometric Surface Map**  
**Targeted Brownfields Assessment, Former JARD Company Site**  
**Town of Bennington, Vermont**

Sources: Orthophotography, NRCS, 1992-1995; Monitoring Wells, Wehran, 1990-1993 & EPA, 2000; Groundwater Contours derived from Stone sampling, 2005.





- FR Home
- About the Site
- FR Listserv
- FR Search
- Contact Us

- Selected Electronic  
Dockets
- Regulatory Agenda
- Executive Orders
- Current Laws  
and Regulations

U.S. Environmental Protection Agency

Federal Register Environmental Documents

Recent Additions | Contact Us | Print Version    Search:

[EPA Home](#) > [Federal Register](#) > [FR Years](#) > [FR Months](#) > [FR Days](#) > [FR Daily](#) > Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act

# Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act

[Federal Register: July 3, 1997 (Volume 62, Number 128)]  
[Notices]  
[Page 36078-36079]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr03jy97-90]

=====

-----

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act

In accordance with Departmental policy, 28 CFR 50.7, notice is hereby given that a proposed Consent Decree in United States and State of Vermont v. Town of Bennington, et al., Civil Action Nos. 2:97CV197 and 2:97CV208 was lodged on June 30, 1997, with the United States District Court for the District of Vermont. The complaint in this action seeks (1) to recover, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (```CERCLA```), 42 U.S.C. Secs. 9601 et seq., response costs incurred and to be incurred by the U.S. Environmental Protection Agency (```EPA```) at the Bennington Landfill Superfund Site located in the Town of Bennington, Vermont (```Site```); and (2) injunctive relief under Section 106 of CERCLA, 42 U.S.C. Sec. 9606. The defendants are Add, Inc., Bennington College, Bijur Lubricating Co., Central Vermont Public Service Corporation, Chemfab Corporation, CLR Corporation, Courtaulds Structural Composites, Inc., Eveready Battery Company, Inc., G-C-D-C, Inc. (f/k/a Bennington Iron Works, Inc.), H.M. Tuttle Co., Inc., Johnson Controls, Inc., MASCO/Schmelzer Corporation, Southwestern Vermont Medical Center, Textron, Inc., Town of Bennington, Vermont, Triangle Wire and Cable, Inc., U.S. Tsubaki, Inc., Vermont Agency of Transportation and Vermont Bag and Film, Inc.

The proposed Consent Decree embodies an agreement with 5 potentially responsible parties (```PRPs```) at the Site pursuant to Sections 106 and 107 of CERCLA, 42 U.S.C. Secs. 9606 and 9607: (1) to perform a non-time critical removal action (```NTCRA```) at the Site comprising the design, construction and monitoring of a multi-barrier cap; and (2) to implement a natural resource damages (```NRD```) restoration project. The proposed Consent Decree also embodies an

agreement with 14 PRPs at the Site pursuant to Section 122(g) of CERCLA, 42 U.S.C. Sec. 9622(g), to pay \$1,776,600, in aggregate, in settlement of claims for past and future response costs at the Site and claims for natural resource damages. The monies paid by these 14 settlers will be used to partially fund the NTCRA and the NRD restoration project being performed by the 5 performing parties.

The Consent Decree provides the settling defendants with a release for civil liability for EPA's and the State of Vermont's (``State's'') past and future CERCLA response costs and natural resource damages at the Site for resources under the trusteeship of the Secretary of the Interior and the Secretary of Commerce, through the National Oceanic and Atmospheric Administration, and under the trusteeship of the State.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication, comments relating to the proposed Consent Decree.

[[Page 36079]]

Comments should be addressed to the Assistant Attorney General for the Environmental and Natural Resources Division, Department of Justice, P.O. Box 7611, Ben Franklin Station, Washington, D.C. 20044, and should refer to United States and State of Vermont v. Town of Bennington, et al., DOJ Ref. No. 90-11-3-868A.

The proposed consent decree may be examined at the Office of the United States attorney, 11 Elmwood Avenue, Burlington Vermont, 05401; the Region I Office of the Environmental Protection Agency, Region I Records Center, 90 Canal Street, First Floor, Boston, MA 02203; and at the Consent Decree Library, 1120 G Street, NW., Fourth Floor, Washington , DC 20005, (202) 624-0892. A copy of the proposed consent decree may be obtained in person or by mail from the Consent Decree Library, 1120 G Street, Fourth Floor, NW., Washington, DC 20005. In requesting a copy, please refer to the referenced case and enclose a check in the amount of \$40.75 (25 cents per page reproduction costs), payable to the Consent Decree Library.

Bruce Gelber,  
Deputy Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 97-17604 Filed 7-2-97; 8:45 am]  
BILLING CODE 4410-15-M

---

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

Last updated on Tuesday, December 20th, 2005  
URL: <http://www.epa.gov/fedrgstr/EPA-GENERAL/1997/July/Day-03/g17604.htm>



January 28, 2003

COPY

Mr. Dan Riley  
Vermont Natural Resources  
Air Pollution Control Div.  
103 S. Main Street  
Building 3 South  
Waterbury, VT 05621-0402

RE: Updating Air Pollutant Emissions Inventory

Dear Mr. Riley,

The enclosed documentation is in response to your letter. The enclosed information is for your review and records.

Enclosed please find a check in the amount of \$20.97 the year 2002 emission fees. If you have any questions or comments pertaining to this report, please feel free to contact me at (802) 447-7561 ext 6160.

Sincerely,

**U.S. TSUBAKI, INC.**  
**P T COMPONENTS DIV.**

*Charles Brendese*

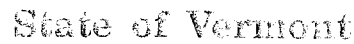
Charles Brendese  
Plant Engineering Supervisor

CB:sw

Encs

Chuck Brendese  
U.S.T's copy  
it will be  
mailed out  
copy to USCC  
on 1/31/03 EW





AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation

U.S. Tsubaki  
Mr. Charles Brendese, Facility Manager  
222 Bowen Rd  
Bennington, VT 05201

Thank you for the opportunity to visit your facility to discuss environmental issues associated with U.S. Tsubaki's manufacturing operations. The company has proactively addressed environmental and worker health and safety issues over the years as is shown by the voluntary implementation of the powder coating system, coolant recycling program and elimination of degreasing solvents, including mineral spirits. As I explained, the primary purpose of my visit was to help you understand any applicable environmental regulations. Please be assured that the following comments will not be shared with regulatory personnel from this Department.

In general, wastewater at U.S. Tsubaki is drummed for shipment by a certified hazardous waste hauler, evaporated in one of two engineered evaporators or discharged to the municipal treatment plant. A recommendation (not a requirement) is to develop a comprehensive inventory of wastewater streams, including the estimated volume, the presence of likely contaminants and current disposal practice(s) for each. Once an inventory is established, you can assess resource issues and the compatibility of current practice with any regulatory limitations. For any discharge to the municipal system, you should have permission (preferably in writing) from the local authority.

HRS Reference #109

MAY - 1 2002  
JUST INC. BENNING

3. Where sent off-site via a certified transporter of hazardous waste, coolant should be managed as “exempt”, in accord with Fact Sheet 2, as mentioned above. If your transporter requires that a Massachusetts hazardous waste code be used on the manifest, you should make certain that the VT99 waste code for non-hazardous waste under the VHWMR is entered in Box J of the manifest form. This assures that this material does not get counted in determining the facility’s generator status under the VHWMR, AND that the facility is not taxed for this wastestream. Also, when co-mingling aqueous wastestreams with spent coolant to be managed under the exemption, please be sure these wastestreams are not hazardous or the entire mixture may be viewed as hazardous waste. Based on my preliminary assessment, I would think any such wastestreams should be looked at to determine if they are more than 5% by weight petroleum (VT02) or perhaps exhibit the characteristic of toxicity for a regulated metal like chrome (D007) or lead (D008). As generator, you can simply find that such wastestreams do not exceed the regulatory thresholds based on process knowledge in lieu of laboratory testing.

4. Satellite storage. U.S. Tsubaki uses satellite accumulation of hazardous waste at more than one location in the plant. Satellite accumulation is an option for small (and large) quantity generators who may choose to use the simplified practices for handling hazardous wastes which accumulate in their workplaces rather than by routinely transporting wastes to more distant accumulation and storage areas. Applicable standards include :

- \*the hazardous waste container must be at or near the point of generation and under the control of the person who operates the machine or the process that makes the waste;
- \*the container must be in good condition and compatible with the waste placed in it;
- \*the container must be kept closed except to add or remove waste;
- \*the container must be marked with the words “hazardous waste” and words to identify its contents;
- \*no more than 55 gallons of any one wastestream per satellite accumulation area;
- \*once the container is full, it must be moved within three days to the short term storage area or else shipped off-site via a certified hazardous waste transporter. If moved to the short term storage area, U. S. Tsubaki would then have 180 days to ship the waste off-site, assuming the facility is classified as a small quantity generator (SQG);

I hope you find this information useful. Please call me at 241-3629 if you have any questions or if I can be of further assistance.

Sincerely :

  
Paul Van Hellebeke  
Waste Prevention Specialist, EAD

802-241-3888

**CERTIFICATION OF DATA ACCURACY**  
For Purposes of Emission Calculations

This form must be signed by an individual responsible *for* the completion and certification of the data contained in the forms attached which are intended to meet both the requirements of State Statute {10 V.SA 555(c) and 3V.S.A. 2822(1)(B)} and the requirements for "Emission Statements" contained *in* the Federal Clean Air Act as amended in 1990. Certification indicates that the signatory takes legal responsibility for the accuracy of the information on the form.

**The data presented herein represents the best available information and is true, accurate, and complete to the best of my knowledge.**

Charles Brendese

Print Full Name

Plant Engineering Supervisor

Print Full Title

*Charles Brendese*

Signature

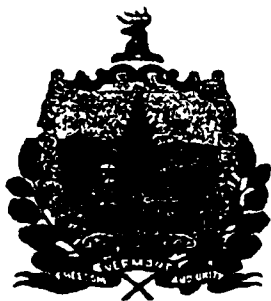
*1/29/03*

Date of Signature

(802) 447-7561

Telephone Number

FORM A



VERMONT AGENCY OF NATURAL RESOURCES  
2002 AIR POLLUTANT EMISSION INVENTORY  
HAZARDOUS AIR CONTAMINANTS  
PRODUCT USAGE AT FACILITY

(Please consider using FORM B if you have control devices you would like to receive credit for &/or you have reason to believe that less than 100% of a certain HAC is emitted to the air from a particular product)

FACILITY NAME	U.S. Tsubaki, Inc.		
MANUFACTURER/TRADE NAME	MANUFACTURER'S PRODUCT	NET ANNUAL USAGE* (In Gallons or lbs)	PROCESS(es) NAME & DESCRIPTION(S)
Suburban Propane LP/Gas	UN1075	44,487 gal	Heating
Castrol Ind. Syntilo 9930	SYN9930	770 gal	Cutting & grinding fluid

\*NOTE:  
Net Annual Usage = [Beginning of Year Formulation Inventory] + [New Formulation Purchases] – [End of Year Formulation Inventory]-  
[Unused Formulation Disposed or Transferred off-site ( verifiable by shipment records, in gallons)]

## 2002 Air Pollutant Emissions Inventory

For Criteria Pollutants

Filling out this form is only necessary if a form with an assigned stack number has not been supplied for a combustion source at your facility. For additional combustion source emissions, please duplicate this blank form and then provide the information requested for calendar year 2002. Use a single form for each different type of combustion air pollution source at your facility not previously included. If unreported fuel consumption occurred in more than one similar source the fuel usage may be totaled on one form. Examples of similar source types are : fuel oil boilers, gas, or propane heating in similar sized units. If it is determined that emissions from this source type are negligible, no fee will be assessed for their emissions.

If you have questions, or desire assistance with completing the inventory, please call Dan Riley at (802)-241-3858.

FacilityName:

U.S. TSUBAKI, INC.

Person Completing Inventory Form

CHARLES BRENDSE

Source Description:

WASTE OIL BURNER

Combustion Information :

Fuel Type :

WASTE OIL

2002 Fuel Consumption : (supply units)

9600 gal

Sulfur Content of Fuel (%) :

.5

Ash Content of Fuel (%) :

0

When you have totaled the fuel consumption for more than one similar source on this form the combustion parameters below should be representative values for each similar unit :

Maximum Heat Input (million BTU/hr) :

Burner Rating:

140,000

Boiler Rating:

Maximum Actual Firing Rate (million BTU/hr):

140,000

Vermont Agency of Natural Resources  
2002 Air Pollutant Emissions Inventory

Volatile Organics Source  
For Criteria Pollutants

The information displayed on this form is that which is currently on file for your facility. It is based on inventory forms completed for calendar year 2001 or the most recent year available. We need to update the information to calendar year 2002. Please review the information contained in the boxes carefully. If there is no value in a box, write in the correct 2002 value. If there is a value, but it is incorrect for 2002, cross out the value and in its place write the correct value.

If you have questions, or desire assistance with completing the inventory, please call Dan Riley at (802)-241-3858.

Facility Name : U.S. TSUBAKI, INC.

Person Completing Inventory Form Charles Brendese

Facility ID: BE1270

Source Description: Solvent and coating usage

Stack Number: 3

Source Number: 3

Segment Number: 1

Source Classification Code: 4-02-001-01

Operational Data:

HoursPerDay:		WinterThroughput (%) :	25
DaysPerWeek:	0	SpringThroughput (%) :	25
WeeksPerYear:	0	SummerThroughput (%) :	25
HoursPerYear:	0	AutumnThroughput (%) :	25

(Over)

Process no longer in use

Volatile Organics Source

Material's Usage: (tons/year)

Type of Material	% Volatile***	Quantity Input	Waste Recovered	% VOC Of Waste**

- \* If the material types listed above are generic (ie Inks, solvents), please list the specific types or quantities used on separate sheets. Include CAS number if compounds are chemically broken down.

\*\* An accurate value for percent volatility of waste must be entered for waste recovered to be accounted for in the emission estimate

\*\*\* Including all compounds excluded under the Federal VOC definition

Stack Parameters : (Note: This information only necessary when just one stack exists).

Stack Number:3

Stack/Duct Discharge Height (Feet)0.0

Stack/Duct Inner Diameter at Exit (Inches):0.0

Exit Gas Temperature (Deg. F):68

Flow Rate at Exit (Actual FT3/Min):0

If an air pollution control device for the source exists inspect the following information and correct if necessary:

VOC Control Device:none

Theoretical Efficiency (%)0

If an estimated emission rate exists, supply the information below:

Estimated Emission Rate\*

Basis of Estimate

\* If test data 4 years old or less is available.

The information displayed on this form is that which is currently on file for your facility. It is based on inventory forms completed for calendar year 2001 or the most recent year available. We need to update the information to calendar year 2002. Please review the information contained in the boxes carefully. If there is no value in a box, write in the correct 2002 value. If there is a value, but it is incorrect for 2002, cross out the value and in its place write the correct value.

If you have questions, or desire assistance with completing the inventory, please call Dan Riley at (802)-241-3858.

Facility Name : U.S. TSUBAKI, INC.

Person Completing Inventory Form Charles Brendese

Facility ID: BE1270

Source Description: fuel burning equipment (propane)

Stack Number: 1  
Source Number: 1  
Segment Number: 1  
Source Classification Code: 1-01-010-02

Operational Data:

HoursPerDay:	<div>24</div>	WinterThroughput (%) :	<div>54</div>
DaysPerWeek:	<div>5</div>	SpringThroughput (%) :	<div>24</div>
WeeksPerYear:	<div>50</div>	SummerThroughput (%) :	<div>4</div>
HoursPerYear:	<div>6000</div>	AutumnThroughput (%) :	<div>18</div>

(Over)



Combustion Source

Fuel Type : PROPANE

2001 Fuel Consumption: (supply units) 44,487.80

Sulfur content of Fuel (%): 0 Ash Content of Fuel (%) : 0

Maximum Heat Input (million BTU/hr) :

Burner Rating: 0 Boiler Rating: 0

Maximum Actual Firing Rate (million BTU/hr)

Percent Space Heat: 0

Percent Process Heat: 100

Stack Parameters:

Stack Number: 1

Stack/Duct Discharge Height (feet) : 0.0

Stack/Duct Inner Diameter at Exit (inches) : 0.0

Exit Gas Temperature ( deg. F) : -459

Flow Rate at Exit (actual FT3/min) : 0

If an air pollution control device for the source exists inspect the following information and correct if necessary

TSP Control Device:	none	Theoretical Efficiency:	0
802 Control Device:	none	Theoretical Efficiency:	0
NOx Control Device:	none	Theoretical Efficiency:	0
VOC Control Device:	none	Theoretical Efficiency:	0
CO Control Device:	none	Theoretical Efficiency:	0

If an estimated emission rate exists, please supply the information below.

Estimated Emission Rate\*:

Basis of Estimate:

\*If test data 4 years old or less is available

U.S. TSUBAKI INC.  
PT COMPONENTS  
222 BOWEN ROAD  
BENNINGTON, VT 05201

THE BANK OF BENNINGTON  
BENNINGTON, VT 05201  
58-7260/2116

5953

1/29/2003

PAY TO THE ORDER OF State of Vermont- Air Pollution Ctrl Div \$ \*\*20.97

Twenty and 97/100\*\*\*\*\*

DOLLARS  
Security features  
included.  
Details on back.

MEMO 2002 Emissions Fees

*Gary L. Spence* MP

⑈005953⑈ ⑆211672609⑆ 01 56 005611⑈



## TOWN OF BENNINGTON

January 31, 2006

Jessica B. Roberts  
Tighe & Bond, Inc  
53 South Hampton Road  
Westfield, MA 01085

Re: U.S. Tsubaki Property Discharge – Bennington, VT

Dear Ms. Roberts,

My staff and I have reviewed the analytical data relating to the U.S. Tsubaki facility clean-up project here in Bennington, VT. Based on our review and discussion with Randy Bean from the State of Vermont Agency of Natural Resources, ***we are ready to allow the discharge from this facility clean up*** to our municipal sanitary sewer system.

We would appreciate some advance notice, however, as to when the clean up will begin. Additionally, we would also like some information on the contractor doing this clean-up including contact persons and telephone numbers where they may be reached.

We look forward to working with you and the contractor to again make this property a vibrant working facility in our community. If you have any further questions or concerns, please feel free to contact me at the Bennington Town Offices at (802) 442-1037.

Sincerely,

Terrance A. Morse  
Water Resources Superintendent

TAM/leb  
E:/ww/corresp/gen/Jroberts-T&B-UST Discharge 1-31-06



## State of Vermont

---

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main St. - Sewing Bldg.  
Waterbury VT 05671-0405  
Telephone: (802) 241-3822  
FAX: (802) 241-2596

January 20, 2006

Jessica B Roberts  
Tighe & Bond, Inc.  
53 Southhampton Road  
Westfield, MA 01085

**RE: Discharge to Bennington Wastewater Treatment Facility  
Wash-water from U.S. Tsubaki Facility Clean-up**

Dear Ms. Roberts,

We have reviewed your submission regarding the discharge of water generated from the cleaning of the former U.S. Tsubaki facility to the Bennington Wastewater Treatment Facility.

Based on a review of the analytical data generated from the sampling of this building and the small volume of the discharge (~65,000 gallons), this discharge should not impact the proper operation of the Bennington Wastewater Treatment Facility or pass through without treatment. Therefore a pretreatment discharge permit is not needed.

Please note that this letter does not constitute authorization from the Town of Bennington to discharge to their wastewater treatment facility. The Town has the ability to require monitoring or impose other limitations they deem necessary.

Also please note that if the quality or the volume water discharged to the treatment facility appreciably changes for those detailed in your submission, this determination may no longer be considered valid and the discharge may be subject to the provisions of 10 V.S.A. Sections 1259, 1263, 1275 and 8010.

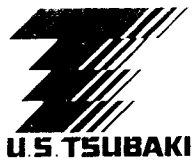
If you have any question regarding this letter, please feel free to contact me.

Sincerely,

Randy Bean, Environmental Analyst IV

cc.

George LaBlanc, Town of Bennington WWTF  
Dennis Bryer, VT DEC WWMD



October 4, 2005

Mr. P. Howard Flanders, Director  
Department of Environmental Conservation  
Waste Management Division  
103 South Main Street / West Building  
Waterbury, Vermont 05671-0404

RE: Sites Management, U.S. Tsubaki  
EPA ID No. VTD 082 275 959  
SMS Site #2004-3196  
Bennington, Vermont

Dear Mr. Flanders:

Per your request for additional information on the closure and environmental condition of the Bennington facility dated August 30<sup>th</sup>, 2005 U.S. Tsubaki submits the following information:

VHWMR Section 7-309 (c)(3)

In regards to an action plan, prior to receipt of the State's letter, U.S. Tsubaki had engaged the services of the Americlean Corporation to clean and remove residues from structural steel, conduits, ductwork, columns and other interior surfaces of the building. All materials will be disposed of in accordance with State and Federal guidelines and regulations. See attached proposal for details.

Phase I & Phase II Assessments

In the Phase I and Phase II assessments, including work performed by Tighe & Bond Company, it was noted that U.S. Tsubaki was classified as a small quantity hazardous waste generator (SQG) and was extremely diligent in its operation by notifying and inviting regulators to the facility at various times during its tenure of operation in Bennington to assure compliance with all regulations.

Triangulation of test wells

Tighe & Bond agrees with the concept of triangulation of test wells. In its efforts to triangulate however, Tighe & Bond experienced "auger refusal" on several attempts and was unable to set an additional well. Tighe & Bond felt that the placement of the initial two wells and the results of those tests (MW 1 no detection of compounds, MW2 slightly elevated levels) combined with 13 soil samples taken from the property, the fact that the plant was classified as a SQG and our regular communications with agencies provided sufficient data to support the conclusions of the Tighe & Bond report.

over  
U.S. Tsubaki, Inc. • 301 E. Marquardt Dr. • Wheeling, Illinois 60090 • 847 459-9500  
ISO/QS 9000 Registered Company  
www.ustsubaki.com

Closure of floor drains

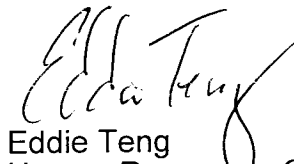
In communication with the former U.S. Tsubaki Production Manager, Charles Brendese, as well as Terry Morse, Water Resources Superintendent from the Town of Bennington, it was determined that the floor drains originally designed to discharge into the stream have been closed. Two floor drains remain open and discharge directly into the municipal system. Dye tests have been performed and interaction with Town of Bennington officials has occurred in regards to any utilization of the remaining open floor drains.

It is our sincere hope that the closure of this facility can be accepted with the explanations provide herein. The condition that exists on the interior of this facility did not exist at the time of closure. The abandonment of the building has led to subsequent collection of moisture in the property, creating the existing condition. As mentioned previously, U.S. Tsubaki had engaged the services of a contractor to properly address this condition prior to the receipt of the State's letter, as we remain diligent in being proactive in our efforts to assure the environmental cleanliness of the Bennington facility.

Please feel free to call with any questions.

Very truly yours,

U. S. TSUBAKI, INC.



Eddie Teng  
Human Resources Generalist

Attachment: Americlean proposal

CC: George Desch, Chief, Sites Management Section  
Peter Marshall, Chief, Management and Prevention  
Patricia Coppolino, Environmental Analyst, Brownfields Redevelopment  
Program  
Tom Rigley, Tighe & Bond (via electronic mail)  
Terry Morse, Town of Bennington

**UST**

119 Bowen Street  
Bennington, VT 05201

Thursday June 23, 2005

Submitted by: Mark Miller

**AMERICLEAN**

51 Newfane Avenue  
South Glens Falls, NY 12863  
(518) 798-6274 Main Office  
(518) 466-6274 Capital District  
(518) 798-6666 Fax  
[www.AMERICLEAN1.com](http://www.AMERICLEAN1.com)

**PROPOSAL****THE PROJECT:**

Oil removal at UST plant, Bennington, VT

**THE PURPOSE**

To provide an environmentally acceptable work place.

**WHY AMERICLEAN:**

AMERICLEAN has been a provider of specialty cleaning and painting services to both industry and the general contracting community for over nineteen years. Our personnel have demonstrated their resiliency by meeting project deadlines and their expertise by generating quality work. Our reputation has been made, not only by our abilities and experience, but by the long list of satisfied customers who call on us time and time again.

**SCOPE OF WORK:**

Clean entire interior of manufacturing space, utilizing application of biodegradable degreaser. This process will be followed by a 4,000 PSI, 200 degree water rinse to remove the majority of grease, oil, dirt, and grime, to provide the cleanest possible surface. Areas to be cleaned include entire ceiling area, exposed vinyl insulation covering, rafters, perlins, beams, columns, fire lines, conduits, ductwork, piping, walls, structural steel, buss bars, overhead cranes and crane rails, interior and exterior of overhead doors, and entire floor area. Rate includes picking up water and diverting it to either sanitary sewer drain or other containment and disposal methods yet to be determined.

All products will be applied following strict manufacturer's guidelines and workmanship of the highest quality standards.

**RESPONSIBILITIES:**

- UST will supply an electrician to cut off all unnecessary power, provide full uninterrupted access to the areas to be cleaned, as well as ensure the availability of electrical power, heat, lighting, dumpster, storage area, and an adequate water source.
- Work delays or stoppages caused by others will be billed at AMERICLEAN's standby rates.
- Safety guidelines and regulations set forth by OSHA, UST, and AMERICLEAN will be adhered to.
- AMERICLEAN will provide all supervision, personnel, supplies, safety gear, transportation, and equipment necessary for the safe and complete performance of the contracted work.
- AMERICLEAN will cover, mask, tape all items not to be cleaned/painted to protect from overspray, but will not be responsible for water damage to electrical equipment.
- AMERICLEAN to provide total job site cleanup.

*Service With Flying Colors*



## State of Vermont

Department of Fish and Wildlife  
Department of Forests, Parks, and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICES FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
**WASTE MANAGEMENT DIVISION**  
103 South Main Street  
West Building  
Waterbury, VT 05671-0404

FAX 802-241-3296  
TEL 802-241-3888

August 30, 2005

U.S. Tsubaki, Inc.  
C/O CT Corporation System  
400 Cornerstone Dr ST240  
Williston, Vermont 05495

CERTIFIED MAIL  
7003 0500 0002 2237 8629

Subject: **Notice of Alleged Violation**  
**EPA ID No VTD 082 275 959**

First Letter  
SMS # 2004-3196

To Whom It May Concern:

Although U.S. Tsubaki certified that the facility located at 222 Bowen Road in Bennington, Vermont, was properly closed on August 6, 2004, on August 8, 2005, a representative of the Bennington County Industrial Corporation informed the Vermont Agency of Natural Resources, Waste Management Division (WMD) that the U.S. Tsubaki building still has widespread residual contamination on the interior surfaces of the structure. The purpose of this letter is to notify you that the Agency of Natural Resources believes that U.S. Tsubaki is in violation of the following Vermont Hazardous Waste Management Regulations (VHWMR) described below:

- VHWMR Section 7-309(c)(3):

(c) Closure

- (3) A generator who no longer generates or manages hazardous waste at a site shall remove all hazardous waste to a designated facility. Remaining containers, tanks, liners, bases, materials, equipment, structures, soil and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility.



**Alleged Violation:** On December 5, 2003, John Miller of this office sent a letter to Mr. Charles Brendese of U.S. Tsubaki, outlining the necessary steps for the proper closure of the U.S. Tsubaki building. A "Certification of Facility Closure - Basic" for the U.S. Tsubaki facility was received from Michelle Schmid of United States Compliance on August 10, 2004. The certification was signed by Mr. Eddie Teng of U.S. Tsubaki. Based on the information submitted by U.S. Tsubaki, Inc, the WMD confirmed facility closure in a letter dated November 1, 2004, from Lynn Metcalf of this office to Mr. Eddie Teng of U.S. Tsubaki.

While the "Certification of Facility Closure - Basic" submitted by U.S. Tsubaki in August of 2004, certified that the closure had been completed in compliance with the provisions of the VHWMR Section 7-309(c), this form did not identify that any efforts were made to clean the structure as required by VHWMR Section 7-309(c)(3). This Agency has now received complaints that there is an "industrial residue" on the interior walls and surfaces of the building. Therefore, U.S. Tsubaki was and is not in compliance with the requirement of 7-309(c)(3) that "remaining containers, tanks, liners, bases, materials, *equipment, structures*, soil and debris contaminated with *hazardous waste or hazardous waste residues* shall be decontaminated or disposed of at a designated facility."

In response to the alleged violations described above and pursuant to 10 V.S.A. Section 8008, the Agency may issue an Administrative Enforcement Order which, among other things, would: assess penalties, require correction and/or remediation of the alleged violations and require other measures as deemed appropriate. Your correction of the alleged violations may lessen the possibility or severity of any enforcement action which may be taken by the Agency.

**Requested Action:** Within 35 days from the signing of this letter, submit a workplan for the complete closure of the U.S. Tsubaki facility at 222 Bowen Road in Bennington, Vermont. This workplan must address all requirements of VHWMR Section 7-309(c), including the decontamination of all remaining equipment, fixtures, tanks, and structures.

If you have any questions concerning this Notice of Alleged Violation, please contact Peter Marshall at (802) 241-3868 or by electronic mail at [peter.marshall@state.vt.us](mailto:peter.marshall@state.vt.us).

Although US Tsubaki has received a Sites Management Activities Complete designation based on the new findings we are requesting that an additional Phase II be conducted. Therefore the WMD is requesting that US Tsubaki hire an environmental consultant to prepare a workplan in accordance with the Site Investigation Procedures Dated June 2005 to address the potential impact to soil and groundwater at the site. This workplan needs to be received by Patricia Coppolino of the WMD within 35 days from the signing of this letter. This work is being required pursuant to Title 10 Part 5 Chapter 159 Section 6617(a) of Vermont Statute, "Any person who has knowledge of a release or a suspected release and who may be subject to liability for a release, as detailed in section 6615 of this chapter, shall immediately notify the agency" (Vermont Agency of Natural Resources-

WMD). The WMD assumes that US Tsubaki, as site owner, is the potentially responsible party.

With the notification of the possible releases, through several complaints, there comes a responsibility to take action to mitigate the effects of the possible release (10.V.S.A. Section 6615b Corrective action procedures). The statute describes a series of actions, from investigation through corrective action, which must be taken by potentially responsible parties.

This First Letter is addressed to responsible parties whenever indications exist that there has been a potential release to the environment. The First Letter represents the beginning of the process of identifying, characterizing, and remediating contaminated sites in Vermont. Please use the following site number that has been assigned to the US Tsubaki property for tracking purposes: SMS # 2004-3196.

Sincerely,



P. Howard Flanders, Director  
Waste Management Division

cc: Peter Marshall, Chief  
Hazardous Waste Management Section, WMD

George Desch, Chief  
Sites Management Section, WMD

Patricia Coppolino, Environmental Analyst  
Brownfields Redevelopment Program, WMD

Peter Odierna, Executive Director  
Bennington County Industrial Corporation

I  
Sent via e-mail  
Received 3/15/04

WASTE MANAGEMENT DIVISION  
103 South Main Street/West Building  
Waterbury, Vermont 05676-0404  
FAX 802-241-3296  
TEL 802-241-3877  
gerold.noyes@anr.state.vt.us

March 11, 2004

EDDIE TENG  
USTSUBAKI  
301 EAST MARQUARDT DRIVE  
CHICAGO, IL 60090

Re: Site Investigation Report, US Tsubaki, Bennington, Vermont, SMS Site #2004-3196

Dear Mr. Teng:

The Sites Management Section (SMS) has reviewed the report titled "*Site Investigation Report US Tsubaki, Bennington, Vermont*". This report was prepared subsequent to the plant closure. The fieldwork was done by Tighe & Bond on January 9, 2004. The report is dated February 2004 and summarizes the degree and extent of contamination encountered during a soil boring and groundwater sampling program. It does not provide any description however of the property use.

At this time based on this report, we are unable to determine if more site investigation is necessary. The report references a Phase I Environmental Site Investigation. Could you please send this Phase I ESA for review? Following this review of the Phase I report we will be able to make a determination if more site investigation is necessary.

If I can be of assistance, please contact me at (802) 241-3877 or [gerold.noyes@anr.state.vt.us](mailto:gerold.noyes@anr.state.vt.us).

Sincerely,

Gerold Noyes, P.E.  
Environmental Engineer  
Sites Management Section

CC: Tom Rigley, Tighe & Bond (via electronic mail)

K:\Site.Files\2003.3101.to.2004.3200\2004.3196.USTsubaki\0311.teng.let.doc ✓

V-311561-08  
Review Ems Audit  
scripts for 1/20/04



## TOWN OF BENNINGTON

July 15, 2003

Charles Brendese  
U.S. Tsubaki, Inc  
222 Bowen Road  
Bennington, VT 05201

Dear Charles,

I am responding to your letter dated May 19, 2003 regarding support/approval of wastewater discharges being made by U.S. Tsubaki, Inc (located at 222 Bowen Rd) to the municipal sewer system. All three of the solutions, which you are now using, have very caustic content raising pH levels coming to the municipal system above the maximum pH levels allowed by ordinance.

I have provided you with a memo dated June 13, 2003 from my staff giving pH levels measured on two occasions in June. Although the initial levels entering the municipal waste stream exceed our permissible levels it appears that with minimal dilution these levels quickly came down to an acceptable level.

My recommendation at this time would be to set up a dilution tank with water and check pH levels before discharging to the municipal system to ensure acceptable levels.

I hope that this will be a cost effective solution to bringing the pH discharge levels into compliance with current Bennington Ordinance standards. Please let me know when you have made modifications to your discharge process and we will re-sample the effluent to ensure it success.

Please feel free to contact me at the Bennington Town Offices at (802) 442-1037, if you have any further questions or concerns.

Sincerely,

Terrance A. Morse  
Water Resources Superintendent



## United States Compliance

---

September 10, 2003

Terry Morse  
Bennington Wastewater Treatment Plant  
205 South Street  
Bennington, VT 05201

Re: U.S. Tsubaki, Inc.  
119 Bowen Road  
Bennington, VT 05201-2017

Dear Terry Morse:

This letter is in response to our conversation September 9, 2003 regarding the wastewater permit status for U.S. Tsubaki, Inc.

U.S. Tsubaki, Inc. has effectively lowered their pH levels with the installation of their neutralization system. The system has allowed the facility to properly monitor pH levels and to prevent the high alkalinity levels from occurring.

As a representative of U.S. Tsubaki, Inc., I am requesting written documentation that the facility does not require a wastewater permit, as long as all wastewater discharge is properly monitored prior to discharge.

Thank you for your attention to this matter. If you have any questions regarding this request, please do not hesitate to contact me.

Sincerely,

Jessie Wratz  
Environmental Specialist  
Industrial Discharge Division

cc: Charles Brandese, U.S. Tsubaki  
Liz Green, U.S. Compliance, EHS Advisor

*File* P. 2/12



February 17, 1994

Mr. Michael J. Quinn  
The Law Firm of D'Ancona & Pflaum  
Suite 2900  
30 North LaSalle Street  
Chicago, IL 60602

RE: ~~Bennington Landfill Superfund Site~~

Dear Mr. Quinn,

I hope the following answers to your questions will help resolve the above matter. I will do it in two parts: U.S. Tsubaki (U.S.T.) being the Bowen Road site and U.S. Tsubaki (Sibley) being the Main street site.

Q) What do we know we disposed of at this landfill site?

A) U.S. Tsubaki (U.S.T.), Bowen Road site, could have had Speedy-Dri dumped at the site during the time frame of April 1977 and February 1986. This would not have been an excessive amount, all Speedy-Dri was not oil soaked. The balance to this site was general garbage.

Q) If we gave this material to a hauler, what was the material generated at this site that ended up at this particular landfill?

A) The material listed in the first question is the same material that was given to a hauler (general garbage, Speedy-Dri (not oil soaked)) from the Bowen Road site.

Q) If no hazardous materials were disposed of at this landfill site, where were the hazardous materials disposal of and by whom?

A)

1. The Bowen Road site of U.S.T. spun all steel chips to remove all oil or water soluble residue, these were then removed by Environmental Action of North Adams, MA as scrap steel and recycled.
2. Grinding sludge, contrary to the state report, was not put into the landfill, it was spun with the steel machine chips to remove the oil residue and taken away with the chips to be recycled, hauler was Environmental Action.
3. Again, contrary to Burns and Levinson's report as well as the state report dated March 10, 1986 (attached), filtration sludge was not disposed of at the landfill (see memo dated March 14, 1986 pg. 2). This material was recycled and the steel fines were again spun to remove residue and sent out with the chips.
4. Four barrels of waste were hauled away by Cecas Treatment Corp., please see memo to file dated February 14, 1986, attached.

Q) What documents exist regarding violations by U.S.T. of Vermont Hazardous Waste Management regulations.

Mr. Michael J. Quinn  
PAGE 2

A) Please see attached March 10th letter, March 14th letter, March 14th memo to file, March 25th letter and April 11th letter.

We have had no other violations but have gone through several inspections.

The second part of this and the area they appear to refer to the most, is U.S. Tsubaki Sibley. This was a facility we purchased in March of 1980 located on Main Street Bennington, VT.

U.S. Tsubaki only purchased the building and the equipment, all personnel were terminated and some rehired as U.S. Tsubaki employees.

The Main Street site did manufacture sprockets for about six or seven weeks, it was then decided to move the whole operation to the Bowen Road site.

About mid April 1980, manufacturing was discontinued at the Main Street site and all equipment and personnel were moved to the Bowen Road site June 1, 1980.

All steel chips from this Main Street site were taken away by Environmental Action during the period U.S. Tsubaki was in operation (March 1980 through May 1980). All general rubbish was also removed by Environmental Action, North Adams, MA.

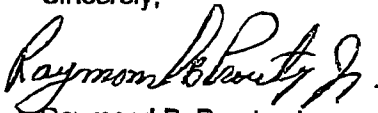
It should be noted that the Main Street site prior to the U.S. Tsubaki purchase was an ongoing active business owned by Claiber, Allsop, and Edward L. Sibley (owner Myron Early and Tony Sibley). All three of these organizations did use the landfill as dumping grounds for steel chips as well as all other rubbish.

During the years that these three different organizations owned Sibley, they did have an employee of Sibley's remove the chips and rubbish to the Bennington landfill by means of a jeep and trailer.

During the time Claiber owned Sibley, the chips were spun to remove the oil; however, I believe the chips still went to the landfill.

If I can be of further help, please do not hesitate to call.

Sincerely,



Raymond B. Prouty, Jr.  
V.P. & General Manager  
Sprocket Division

RP/pg

cc: Ron Rizzuto



## State of Vermont

## AGENCY OF ENVIRONMENTAL CONSERVATION

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Water Resources & Environmental Engineering  
Natural Resources Conservation Council  
State Geologist

Montpelier, Vermont 05602  
Department of Water Resources  
and  
Environmental Engineering

March 10, 1986

REF: MEMO #2

Mr. Raymond Prouty, Plant Manager  
U.S.T. Incorporated  
P.O. Box 1200  
Bennington, VT 05201

RE: Letter of Deficiency

Dear Mr. Prouty:

On February 10, 1986, representatives of the Vermont Agency of Environmental Conservation's Hazardous Waste Management Program conducted an inspection at U.S.T. Incorporated of Bennington, Vermont. At that time it was determined that U.S.T. Incorporated was in violation of the following Vermont Hazardous Waste Management Regulations:

Section 6-609 (2)(a):

The storage of hazardous waste shall be conducted in such a manner that no disposal shall occur.

1. Oil soaked speedi-dri was improperly disposed of to the Bennington Landfill. Oil is a listed hazardous waste.
2. Grinding sludges from the cutter grind operation were improperly disposed of to the landfill. Grinding sludge is a listed hazardous waste.
3. Filtration sludge from the recycling of the Trim-Sol is considered a hazardous waste by virtue of the toxic organics commonly found in water soluble oil sludges. This filtration material was improperly disposed to the landfill.



-2-

Section 6-609 (2)(c):

All containers used for the storage of hazardous waste shall be clearly marked and labeled at the time the container is first used. The marking and labeling shall include: the generator's name, address and identification number; the name of the hazardous waste stored therein; the words "Hazardous Waste"; the date when the container was first used; and for containers of less than 110 gallons, the following language, "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, Contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."

None of the fifty-five gallon drums were properly labeled or marked as required.

Please provide written certification by April 6, 1986, verifying that the necessary modifications have been made. The Agency is authorized under 10 V.S.A. Section 6610a to undertake formal proceedings in this matter. However, it is our preference to establish compliance voluntarily. If U.S.T. Incorporated does not respond with written verification by April 6, 1986, a formal Notice of Violation will be issued and enforced to the provisions set forth under Vermont State Hazardous Waste Regulations. A follow-up inspection will be conducted shortly after this date to verify compliance.

I feel confident these violations will be corrected voluntarily.

Sincerely,



Gary Gulka, Chief  
Hazardous Waste Management Program

GG/kbr



## ROLLER CHAIN AND SPROCKETS

BOX 1200, BOWEN ROAD  
BENNINGTON, VT. 05201

(802) 447-7561

March 14, 1986

Mr. Ken Rota  
Dept. of Water Resources and  
Environmental Engineering  
Montpelier, VT 05602

SUBJECT: Hazardous Waste

Ref. Memo #1: Memo to File from C. Anderson dated 2/19/86  
Ref. Memo #2: Letter of Deficiency from Mr. G. Gulka dated  
3/10/86

Memo to: Mr. Ken Rota

Based on the writer's telecon with you on 3/13/86, this memo is being written to clarify the differences in the Ref. Memo's 1 & 2.

It was UST's concern in contacting the Dept. of Water Resource and Environmental Engineering on 2/13/86 to obtain assistance and guidance in the proper disposal of (4) barrels of waste.

On 2/10/86 you and Peter Reed visited UST as noted in Ref. Memo #1. We did not realize that our request for help would result in a Letter of Deficiency with the threat of formal action as noted in Ref. Memo #2.

Pursuant to our telecon of 3/13/86 would you please review the writer's comments on Items #1-2 & 3 from Ref. Memo #2 and provide a written opinion from the Dept. of Water Resources and Environmental Engineering.

Item #1: Speedi-dri handling and disposal:

UST is instituting the incorporation of your recommendation for the use of a Wet/Dry vacuum cleaner with a filter to reclaim as much of the liquid spill and minimize the usage of speedi-dri material. Oil soaked speedi-dri will be placed in 55 gallon drums and identified as noted in Ref. Memo #2 as "Hazardous Waste".

Page two

Item #2: Review of Grinding Sludge:

UST requests a reconsideration of the determination of "Grinding sludges from the cutter grind operation as a hazardous waste". This sludge consists of steel particles from high speed steel cutters and aluminium oxide particles from the grinding wheel. This grinding operation is performed with water soluble coolant. It is our understanding that these materials do not constitute a hazardous waste.

Item #3: Clarification of recycling of Trim Sol:

Filtration sludge from the recycling of Trim Sol has not been disposed to the landfill. The following procedure is used at UST to process Trim Sol coolant:

Coolant in a machine ready for recycling is removed from the machine sump by the use of a Sump Cleaner. The coolant is taken and placed in the holding tank of the recycling system. If the system is full the coolant will be temporarily held in 55 gallon drums until capacity is available. The steel fines picked up in the swarf basket of the Sump Cleaner are placed in the Chip Spinner and spun with the other chips. The coolant liquid is piped to the coolant recycling system and the steel chips and fines are placed in the chip dumpster for salvage.

Page #2: Properly Labeled Drums:

UST is procuring suitable labels to identify containers of "Hazardous Waste" as required in section #6-609 of the regulations supplied with Ref. Memo #2.

It is UST's desire to be compliant with the law, but needs the support and guidance of your department while attempting to remain competitive in the market place.

Sincerely,



Carl Anderson  
Engineering Manager

CA:sw

Enclosures

CC: R. Prouty ✓  
J. Cornell  
G. Gulka

REF: MEMO #1

February 14, 1986

Memo to File:

Subject: Hazardous Waste

UST Bennington plant has (4) barrels of waste which consist of the following materials:

1. Rust Preventative - Du Bois #1 RP-5AFT
2. Chem Clean #184 - Chemical Ways Corp.
3. Paint - Enamel 90% with Mineral Spirits 10%
4. Paint - Lacquer 50% and Lacquer Thinner 50%

The writer telephoned the Vermont Dept. of Water Resources & Environmental Engineering on 2/3/86 and spoke with Mr. Ken Rota. It was determined that UST required a Generator's U.S. EPA ID number. Mr. Rota provided a temporary number VTP 000001241 to cover this current requirement. He informed the writer he would be making a visit to UST to review the manufacturing processes and the type of wastes generated.

Messrs. Ken Rota and Peter Reed visited UST Bennington on 2/10/86. Messrs. Rota, Reed and the writer toured the plant. The (4) barrels of waste were viewed and the contents discussed. It was agreed that disposal thru the CECOS Treatment Corp. would be an adequate means of handling the disposal.

The barrels of Trim Sol concentrate and the used Trim Sol solution (waiting processing) were viewed. Mr. Rota stated that water soluble coolants ref. Trim Sol are not considered as hazardous waste.

The UST oil storage area was visited and the writer was asked as to the types of oil products used. Mr. Rota noted that these products would be considered as hazardous waste when and if they are disposed. The writer indicated that these products are normally used up in application.

Sheet 1 of 2

C. E. A.

Sheet 2 of 2

Feb. 14, 1986

Subject: Hazardous Waste

We then toured the manufacturing areas Flame Cut, Plate Boring, Screw Machine, Hobbing, Heat Treat, Drill & Tap, Parts Washer, Painting, Sawing and Lathes. While in the Hobbing Dept. we stopped at Machine #407 noting a large leakage of Hydraulic Oil on the floor around the machine. Speedy Dry had been spread as a dam around the machine. Mr. Rota said that any Speedy Dry containing oil must be considered as hazardous waste and placed in a barrel and disposed of as such. He recommended the use of a Wet/ Dry vacuum cleaner to pick up the spill and the use of a filter to remove the scum. This would reduce the amount of residue to be processed.

Mr. Rota said he would prepare a letter to Mr. Ray Prouty as the Plant Manager of his observations, based on the visit with his recommendations. The writer requested that Mr. Rota forward available regulations pertaining to the handling of Hazardous Waste which would provide guidance to UST.



Carl E. Anderson

C.C. to: Messrs.

J. Cornell

R. Prouty



## State of Vermont

## AGENCY OF ENVIRONMENTAL CONSERVATION

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Water Resources & Environmental Engineering  
Natural Resources Conservation Council  
State Geologist

Montpelier, Vermont 05602  
Department of Water Resources  
and  
Environmental Engineering

RECEIVED  
MAR 2 1986  
NOVEMBER 30 1986  
March 25, 1986

Mr. Carl Anderson, Engineering Manager  
U.S.T., Incorporated  
P.O. Box 1200  
Bennington, VT 05201

RE: March 14, 1986 Letter

Dear Mr. Anderson:

The Hazardous Waste Management Program is in receipt of your March 14, 1986 letter requesting clarification of specific issues related to the operations conducted at U.S.T., Inc. with respect to the hazardous waste management regulations. The Agency has prepared a response.

Item #1: Speedi-dri handling and disposal:

The Agency is in agreement that all oil-soaked speedi-dri shall be managed as a hazardous waste.

Item #2: Review of Grinding Sludge:

Upon reviewing the Material Safety Data Sheets for Trim-Sol, the claims made by Trim-Sol are misleading. The sheets explain that the product is not classified as a hazardous waste by EPA. This is applicable only to the Federal listings for hazardous wastes because the Federal government only lists specific hazardous constituents which creates a loophole for products which are comprised of several of these constituents and thus escape classification as a specifically listed hazardous waste. The Vermont regulations close this loophole.

The Material Safety Data sheets state that the ingredients used in Trim-Sol are listed with the Toxic Substances Control Act (TSCA) Inventory of Chemical Substances. It is obvious from this that Trim-Sol contains toxic materials. The decomposition products reveal the potential generation of hydrochloric gas which signifies some type of chlorinated preservative in Trim Sol that the company is probably classifying as a proprietary information.

-2-

With respect to the grinding sludge, the water soluble coolants which would be found in the sludge are the basis for listing this waste as hazardous.

The sludge must be handled as a hazardous waste. If this waste is put in the chip spinner to recover the oils, the sludge, at a minimum, must be analyzed for the toxic constituents of the Trim-Sol to verify that this process is effective in removing the water soluble oils and rendering the sludge non-hazardous.

Item #3: Clarification of recycling of Trim-Sol:

Because the Trim-Sol is recycled on-site, the filtration sludge that would accumulate both in the filtration unit and the holding and quiescent tanks must be managed as hazardous wastes; the basis for this being the toxic organics commonly associated with water soluble oils. The grinding swarf would not be regulated if the oils can be recovered by the chip spinning unit. At a minimum, an analysis of the grinding swarf would be required as documentation that the spinning process is effective in removing the coolant oil.

Sincerely,



Gary Gulka, Chief  
Hazardous Waste Mgt Program

GG/kbr



## State of Vermont

## AGENCY OF ENVIRONMENTAL CONSERVATION

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Water Resources & Environmental Engineering  
Natural Resources Conservation Council  
State Geologist

UST, INC. BENNINGTON

APR 17 1986

RECEIVED

April 11, 1986

Montpelier, Vermont 05602  
Department of Water Resources  
and  
Environmental Engineering

Mr. Carl Anderson  
U.S.T. Incorporated  
P.O. Box 1200  
Bennington, VT 05201

Dear Mr. Anderson:

As requested, this letter verifies that a follow up inspection was conducted on April 10, 1986 and the deficiencies cited on March 10, 1986 have been corrected. I have enclosed a copy of a recycle/reuse petition to be used for exempting your waste oils from the hazardous waste manifesting requirements. Also, please find a copy of the annual hazardous waste reporting forms.

Please call me immediately if you need any assistance.

Sincerely,

A handwritten signature in cursive script, reading "Kenneth B. Rota".

Kenneth B. Rota  
Hazardous Waste Inspector  
Haz. Mat. Mgmt. Program

\kbr



## LIMITATIONS

1. This report has been prepared for the sole and exclusive use of U.S. Tsubaki (Client) and is subject to and issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report, without the specific written authorization of Client and T&B shall be at the User's sole risk.
2. In conducting the assessment, T&B has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the subject property. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.
3. The objectives of the assessment described in this report were to assess the physical characteristics of the subject property with respect to overt evidence of past or present use, storage, and/or disposal of oil or hazardous materials, as defined in applicable state and federal environmental laws and regulations, and to gather information regarding current and past operations and environmental conditions at and in the vicinity of the subject property.
4. A survey for the presence of asbestos-containing materials and lead-based paint was not conducted as part of this assessment.
5. No attempt has been made to assess the compliance status of any past or present Owner or Operator of the Site with any federal, state, or local laws or regulations.
6. The findings, observations, and conclusions presented in this report, including the extent of any subsurface explorations or other tests performed are limited by the scope of services outlined in our Agreement, which reflects schedule and budgetary constraints imposed by Client for the current phase of environmental assessment. Furthermore, the assessment has been performed in accordance with generally accepted engineering practices and standards set forth by ASTM and the Massachusetts Contingency Plan. No other warranty, expressed or implied, is made.
7. The assessment presented in this report is based solely upon information gathered to date, including a limited number of subsurface explorations (if performed) made on the dates indicated. Should further environmental or other relevant information be developed at a later date, Client should bring the information to the attention of T&B as soon as possible. Based upon an evaluation, T&B may modify the report and its conclusions.
8. If included, the EDR Report/New England First Search Report was conducted under the Notice of Disclaimer/Waiver of Liability included in the EDR/First Search summary report.